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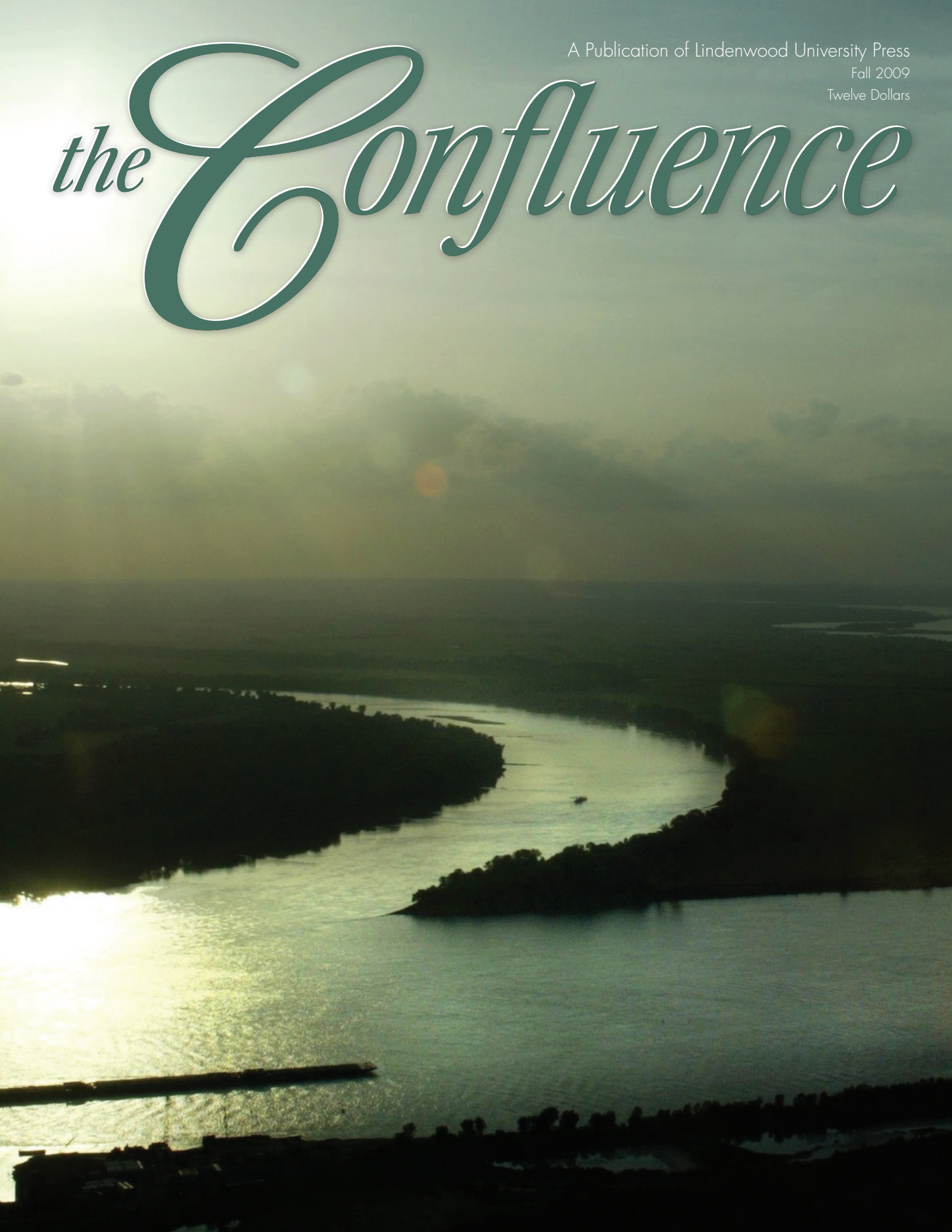
the Confluence



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COVER IMAGE

The floodplain and confluence as it appeared ten years after the "500-year flood" of 1993.

(Photo credit: Teak Phillips/ St. Louis Post-Dispatch file photo)

the Confluence

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If you drive north up Columbia Bottom Road from St. Louis and turn into the park, you can end up on a handsome platform that overlooks the place where the Missouri and Mississippi rivers meet. When a friend and I ride our bicycles up there, we always stop and take a break to watch the rivers, look around, and think.

It's a contemplative place. It is a modern and new space, yet somehow ancient. The forested strip of land in St. Charles County contrasts with barges carrying industrial products and raw materials. The two dozen miles from my home to that point constitute a blending of our entire region: an urban, industrial, and crowded environment juxtaposed with farmland, eagles, and turkeys. Ultimately, the route to the confluence is a microcosm of all the history, nature, economy, policy, and built environment that converge to make up our region. It is, well, a "confluence."

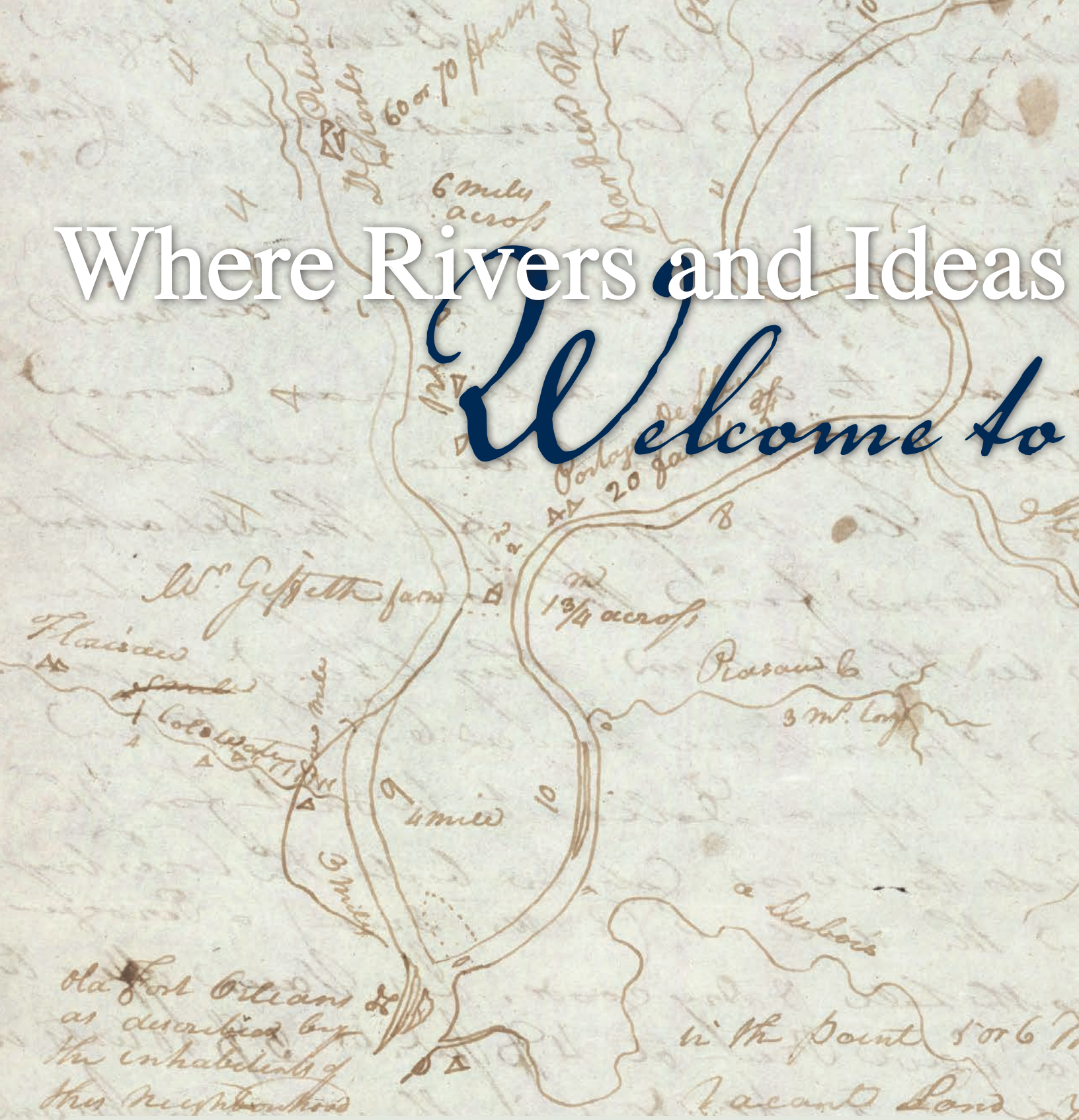
Hence, the name of this publication, *The Confluence*. We want to bring together the best scholarship about our region in lively and interesting ways. We want to mix past and present, old and new, science and art, history and current affairs. Every issue of *The Confluence* will offer a journey through new parts of our region that you will find compelling, interesting, and worthy of discussion.

Consider our first issue. Mark Abbott's article brings up interesting questions about regional governance and planning for progress in a changing world, whether it is because of the advent of the automobile and suburb or the rise of the "new urbanism" and the electronic world. Mark Alan Neels' work on anti-German sentiment can't help but remind us of the efforts to politicize immigration in our own age. David Straight's look at the use of the mail to sell a patent medicine painkiller and government's efforts to regulate it comes to mind whenever we receive an unwanted email touting the benefits of new "miracle meds." Paige Mettler-Cherry and Marian Smith document not just the impact of our actions on the environment and its plants, but on our ability to change it as well. William Glankler's writing on Frank Ricks suggests much about emerging race relations today by studying a seminal moment in American history at the close of the Civil War. At a deeper level, these are articles that connect us not only to our past, but also to one another in a shared experience.

With *The Confluence*, we want to build and advance the notions of thinking, questioning, and analyzing the world around us, to navigate our way back to common shores. We hope you enjoy this premier issue of *The Confluence,* and write to us with your thoughts at confluence@lindenwood.edu.

Jeffrey Smith, Ph.D.
Editor

Where Rivers and Ideas Welcome to

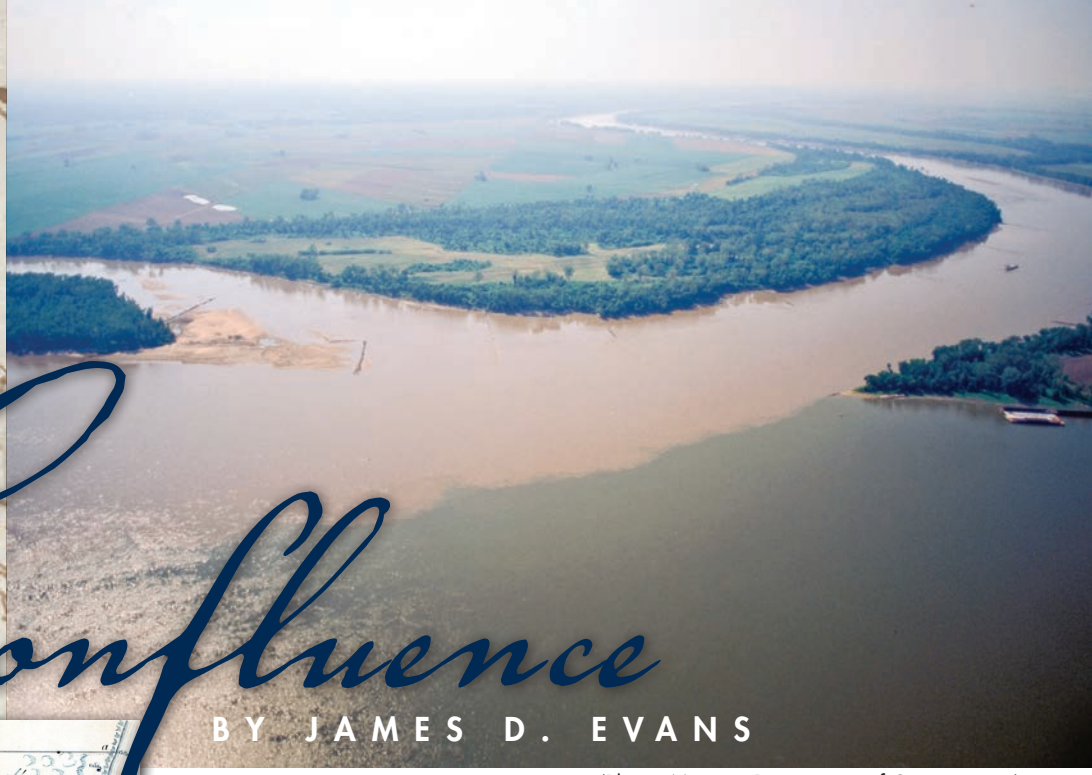


This is perhaps the earliest map of the confluence of the Missouri and Mississippi rivers, drawn by explorer Captain William Clark in his journal as co-captain of the Corps of Discovery in May 1804. Clark drew maps like this one throughout his journals, documenting the route to the Pacific. His compiled map of the West became the shared reference as explorers, writers, ethnographers, and others traveling the Missouri visited Clark before leaving the city.

(Photo:Beinecke Library Digital Collections, Yale University)

Meet the Confluence

BY JAMES D. EVANS



(Photo: Missouri Department of Conservation)

(Photo: Missouri State Archives)

This map of the land at the confluence of the Mississippi and Missouri Rivers is a document found in a civil action of partition filed in the St. Charles Circuit Court, May 1845. In this action, the heirs of Vital M. Garesche asked the court to appoint commissioners who would partition the nearly 3,700 acres equitably among them. The map delineates the shares assigned to each of the heirs and notes several interesting features, such as a horse ferry, corn fields, and log cabins. Also note at the top of the map the land owned by the Honorable Henry Clay. The petitioners were Louisa Garesche, Julius P. Garesche, Alexander J. P. Garesche, Frederick P. Garesche, Ferdinand Louis Garesche, Mary Elizabeth Garesche, and Elizabeth Amelia Garesche.

One of the most striking aspects of the confluence of the Missouri and Mississippi rivers is its changing nature. Even a cursory look at the maps and images over time reveals an ever-changing landscape. Islands appear (and disappear), shorelines change, the rivers' courses meander different places, and sandbars lurk beneath the surface. Even standing and looking at the merging of the rivers and seeing two colors of water converge, one cannot help but wonder which river is flowing into which, and which is the original "Father of All Waters." Together, these two rivers flow over more than 5,000 miles.

When the Corps of Northwest Discovery left Camp Dubois in May 1804 and traveled upriver to begin its journey, the group took the left branch of the rivers. On May 14, Captain William Clark commented that they "proceeded on under a jentle brease up the Missourie," embarking on one of America's greatest adventures. Yet the confluence Clark and the Corps saw was not that of today as you and I view it; the merging of the rivers was some two miles farther upstream. Perhaps that is one of the lessons of history: no matter how much things seem the same, time has altered them.

Writing of his recollections as a riverboatman in *Life on the Mississippi*, Mark Twain found the same unpredictable nature of the river. The currents move sand and shore, that which is seen and unseen, constantly blurring lines of perception and reality that required riverboat pilots to constantly observe the nuances of the river and remember what they had seen.

Gone now are the lines of riverboats at the levees, the "Bloody Island" that hosted duels, the rafts like those used by Huckleberry Finn and Jim—even the island that appears on the 1845 map pictured here. But the river continues to flow past us.

In many ways, these rivers and their confluence are metaphors for us, both as a liberal arts university and as a publication. We're committed to the notion that education is a lifelong pursuit that keeps flowing as it continues to change us. We also see learning as akin to the river, reflecting fields of inquiry such as history, the physical sciences, art and literature, material culture, and the social sciences—disparate parts, yet making up a whole that is our combined past and present. The images on these pages suggest this changing panorama of ideas and inquiries about the rivers themselves.

Herein lies the reason Lindenwood University is publishing *The Confluence* and naming it as such. We see scholarship as interdisciplinary and realize that people in our region are interested in all the factors that shape it. We know that past informs present and that our present shapes our views of the past. As a psychologist, I know that we humans are innately curious; we hope that *The Confluence* both piques and satisfies that sense of curiosity and wonder.

The Seeds of Regionalism

Harland Bartholomew and the Origins of St. Louis Regionalism

By Mark Abbott

Harland Bartholomew at mid-century.
(Photo: Parsons/HBA)

St. Louis is usually not associated with regionalism. Some would even contend that St. Louisans take a perverse pride in their disjointed approach to regional issues. Local urban scholar Terry Jones goes so far as to argue that St. Louis is "fragmented by design."[1] What most St. Louisans do not realize, however, is that St. Louis was at the forefront of thinking about regional governance and regional planning for much of the twentieth century.

(Photo: Christopher Duggan, Lindenwood University)

In a way, this is not too surprising. Circumstances forced it to be. Because of the city/county divorce of 1876 where St. Louis City became a separate county from St. Louis County, the region was already hamstrung in its approach to metropolitan issues during the nineteenth century. While the city boundaries that were carved out in the 1876 agreement were anticipated to give the city enough room to grow for a hundred years or more, the streetcar brought development to the western fringes in less than half a generation.[2] Even before the arrival of the automobile, which accelerated urban growth, city leaders were talking about the need to annex parts of the county to control development taking place in the suburbs. By the time of the 1907 Civic League plan—the first comprehensive city plan in the country—the first generation of St. Louis planners was already quite aware that the "real city" was larger than the political city of St. Louis, and the city/county split was already putting this real St. Louis at a disadvantage in its competition with other major metropolitan areas around the country.[3]

Although legions of St. Louisans—both inside and outside the old political city—have attempted to formulate solutions to St. Louis' regional dilemma, the one person who stands out is Harland Bartholomew, the long time director of St. Louis' city planning department, as well as a noted professor of urban planning at the University of Illinois and the founder of the world's largest planning firm, Harland Bartholomew and Associates (HBA), which was headquartered in St. Louis. While Bartholomew has come under intense scrutiny during the last year due to Colin Gordon's criticism of his and HBA's role in contributing to the region's hyper-racial segregation in his book, *Mapping Decline*, Bartholomew was a leader both in the region and nationally in promoting regional coordination to direct out-of-control urban growth caused by suburbanization a generation ago.[4] Today, many St. Louis planners and metropolitan officials lament the fact that the region does not possess some form of metropolitan government or have a metropolitan plan. Yet Bartholomew and HBA drafted a guide or an outline of what a regional government might look like and what a regional plan might entail as early as 1948 for the Metropolitan Plan Association. As the region now faces the prospect of slipping into the third tier of American cities, maybe it is time to follow Bartholomew's lead sixty years later.

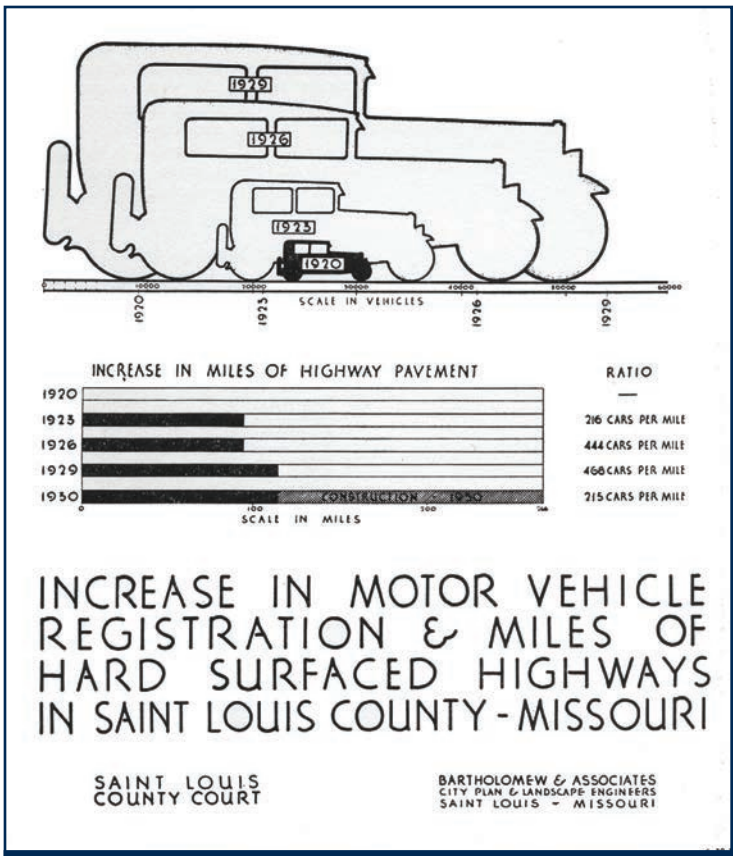
THE EMERGENCE OF ST. LOUIS REGIONALISM

Although St. Louis has a national reputation for its fragmented state, cities across America have been combating regional political disorganization since before the Civil War. Indeed, Boston was ringed by peripheral towns within six years of its founding in 1630. Even St. Louis had suburbs, such as Carondolet, before 1800. However, before the Civil War and well after, most suburbs around the country eagerly sought annexation to defray the cost of desired services. Consequently, regional coordination was seldom an issue since suburbs generally followed the lead of the central city whenever a particular situation demanded a regional response in an effort to entice the central city into wanting to annex them.

But as cities became larger through industrialization and with the advent of the streetcar, some suburbs—especially the more affluent ones—deliberately sought to avoid annexation to escape central city control and central city taxes. By 1900, most major American cities were ringed by suburbs that were determined to remain separate from the central city. Of course, St. Louis was even more entrenched in this pattern than most other cities because of the city/county divorce of 1876, as well as the fact that the Mississippi was both a natural and a political divider. While most St. Louisans did not anticipate that the city would grow out to its borders within a generation of the city/county split, by the time of the World's Fair in 1904, already St. Louis and Clayton were almost touching to the west and to the east, with several industrial suburbs sprouting up on the other side of the Mississippi in Illinois.

By the turn of the century, suburbanization was already causing regional problems for many American cities. The need to coordinate streetcar lines, provide water and sewer service, build and pave streets, and control pollution did not stop at the city limits as the "real city" grew beyond political borders. In some states, cities found sympathetic state legislatures and courts that allowed them greater power to annex surrounding areas.[5] But in Missouri, there was little the legislature could do to help St. Louis. Because the 1875 legislation that established the eventual split between city and county had made St. Louis both a city and a county, any annexation made by the city required a statewide referendum. As a result, St. Louis had few options for coordinating activity in St. Louis County with developments in the city.

Although the Civic League alluded to the already negative impact that St. Louis' inability to annex was having on the city in its 1907 plan, it was ten years before St. Louis' new, young planner, Harland Bartholomew, was even more forceful in his observations concerning regional fragmentation. In a document entitled *The Problems of St. Louis*, Bartholomew listed "the extension of the city limits, or power of the city to secure greater uniformity and permanency of development" as one of the four principal problems confronting St. Louis.[6] As he explained, since 1900 "great increases have occurred outside the city limits and no concerted effort has been made to permit the city to benefit by the increase for which it is responsible." But according to Bartholomew, "population increase [was] not the most serious concern of St. Louis." For him, the real problem was that new factories were locating in the county even though there was still an abundance of appropriate vacant land in St. Louis itself. As a result, many residents, many of whom were quite affluent, were leaving the city, causing "several large, local,



Bartholomew's office often used this chart to demonstrate the need for planners to incorporate rapid expansion of automobiles. In this one, the density of cars on highways more than doubled during the 1920s.

(Photo: Guide plan, Missouri-Illinois metropolitan area...1948, Harland Bartholomew and Associates. University Archives, Department of Special Collections, Washington University Libraries)

Labor Day weekend of 1926 also kicked off the political season, including this cartoon opposing annexation by suggesting that it would cause a mass migration.

(Photo: *St. Louis County Watchman Advocate*, September 7, 1926; State Historical Society of Missouri)

formerly exclusive residence areas [to be] deserted by original owners and occupants, only to rapidly deteriorate, or in some instances, to be completely abandoned, to the great detriment of the property and depreciation of property values."[7]

What Bartholomew did not anticipate in 1917 was that the problem was about to get much worse for not just St. Louis, but also for cities across the country. Although he would later become an expert on its impact and strategies for addressing the challenges it wrought, Bartholomew did not foresee the degree to which the automobile was about to totally restructure urban America. In 1917, the Model T had been around less than ten years, and there were fewer than 8 million cars in the United States. However, between 1920 and 1930, American car registrations mushroomed from eight million to 24 million. At the very time that the political boundaries of American cities were being frozen, the automobile was doubling the size of the streetcar city on which those boundaries were based. In 1907, the streetcar was taking people from University City's "the Loop" to downtown in approximately 45 minutes. By 1917, the automobile was taking people from Richmond Heights and Ladue, several miles farther west to downtown, in the same amount of time.[8]

By the 1920s, American city leaders were becoming aware that they were facing a crisis. While the growing size of the real city was straining the services of the political city—suburbanites were clogging city streets with their new cars—the central city did not have the revenue or the power to control this growth. Although most major American cities were able to expand by a limited amount, the two cities that were the most choked off from their suburbs were Boston and St. Louis. Consequently, they were the most aggressive in trying to rectify the situation. Both attempted to persuade their state legislatures to give them the power to consolidate their adjoining suburbs inside their political structures. Boston tried repeatedly in the 1920s to get legislative approval, but was unsuccessful. St. Louis was not only able to convince the legislature that it needed more latitude in adjusting its boundaries, but it was able to convince statewide voters as well. In 1924, Missourians approved a format for modifying the city boundaries. Under the scheme, a board of freeholders (property owners) would be formed—nine from the city and nine from the county—that would come up with a new city map that would be eventually voted on by the entire state.[9]

After a couple of missteps, the board finally came up with a plan in 1926 which called for the consolidation of the City of St. Louis with the entire County of St. Louis. In effect, the plan called for the creation of a municipality that would have been 553 square miles. The County's response to the plan was quick and devastating. The editor of the Webster Groves newspaper told his readers that Webster Groves "would gain absolutely nothing from such a plan" and that a union with the big city of St. Louis would result only in Webster Groves being bombarded by evil influences like "saloons, soft drink parlors, pool rooms, dance halls and this type of undesirable so-called amusements."[10] With World War I still fresh in his memory, one county probate judge likened St. Louis to Germany and its autocratic government under the Kaiser, recalling, "We sacrificed our men and money to preserve local self-government for Belgium and France." When the election finally came, St. Louis County voters showed their disdain for the plan by voting against it two to one. In one mostly rural precinct, the vote was 274 to one against the plan.[11] Although outstate voters were not as vehemently opposed to the enlarged St. Louis, they voted against it by a healthy margin as well.

Yet, proponents of regional governance in St. Louis were not deterred. They were ready to try again four years later. But this time they came up with a radically different approach. Unlike the scheme in 1926, St. Louis regionalists in 1930 did not propose consolidation, but federation. Taking their cue from London and the London County Council that had divided the 117-square-mile county of London into 28 semi-autonomous boroughs in 1888, champions of a federative metropolis in St. Louis, like those around the country, argued that a dual-level system brought efficiencies to region-wide governance while retaining local identity and control. Similar to the national government and the states, the idea was that different governments would perform different functions. Municipalities would have responsibility for some activities while the larger federative government would carry out those that were of concern to the entire region and which needed to be coordinated to realize the greatest efficiency and rationality. As urban historian Jon Teaford points out, the concept was aimed at suburbanites who liked suburban life, but saw the need to address metropolitan

concerns. "Such a scheme," Teaford maintains, "appealed to many of the twentieth-century Americans who sought a reconciliation between city and suburb."[12] It was a way of having the best of both worlds. Suburbanites could have the sense of community and local control of the suburb, but still realize the economies of scale associated with centralization.

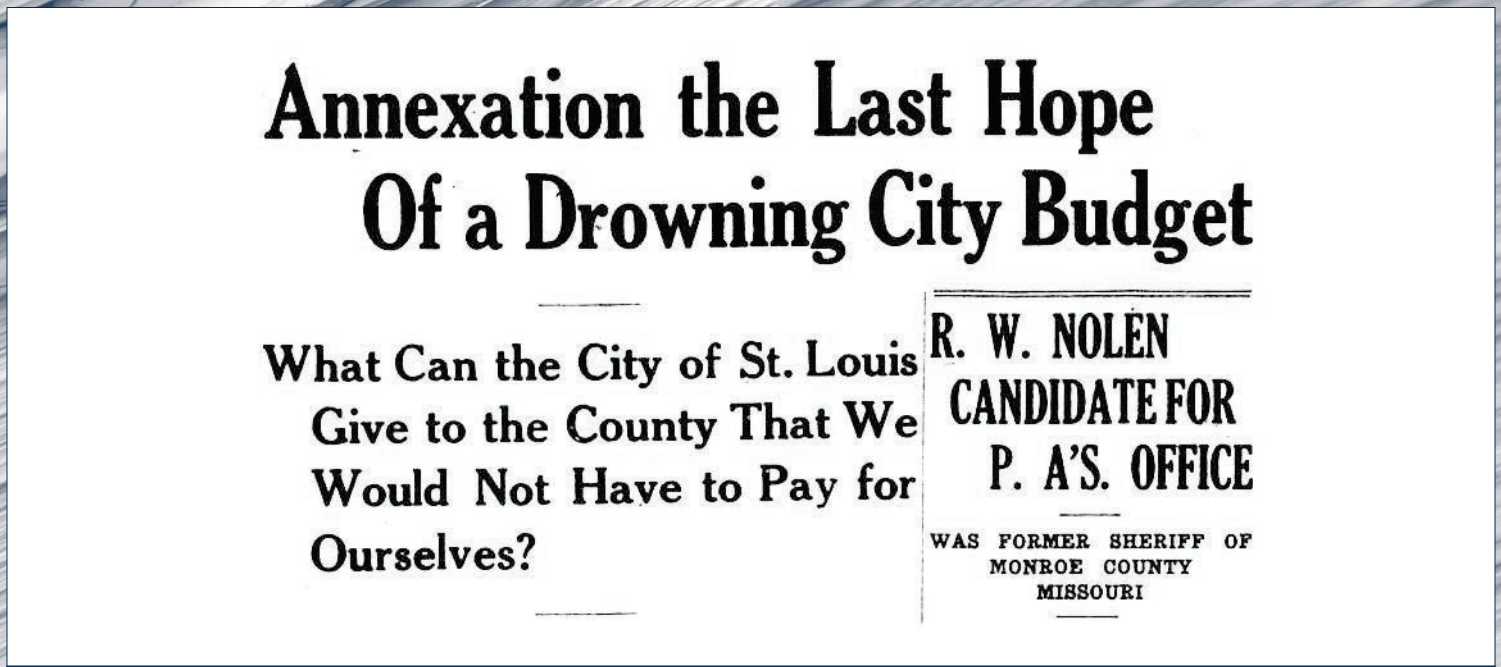
This idea of a federative metropolis had been discussed in a number of cities from the 1890s on. But St. Louis was only one of three cities (Cleveland and Pittsburgh were the other two) that attempted to push the idea through state governance for ratification. In St. Louis, what is interesting is that the push did not come from the central city, but the suburbs. Adjacent suburbs such as University City and Clayton had become home to many professionals and business-elites. These members of the new professional class, like their counterparts around the country, had been influenced by the ideas of efficiency experts like Frederick Winslow Taylor and wanted to apply the ideas of scientific management to governance. Devotees of rationality and order, these suburbanites were appalled by the wastefulness of the tremendous duplication of services that took place as each suburb tried to have its own school system, its own fire department, its own police department, and so forth. For them, the bottom line was getting better services for lower taxes.[13]

The leader of the federative model in St. Louis was Robert Roessel, the City Attorney in Webster Groves, who had been an active opponent of the 1926 consolidation scheme. Roessel and two of his anti-consolidation allies, Kirkwood businessman Joseph Matthews and Washington University Professor George Stephens, formed a committee sponsored by the St. Louis County Chamber of Commerce in 1929 to push for a federative construct. Bringing in federative government specialist Thomas Reed, Professor of Municipal Government at the University of Michigan, the committee developed a proposal for a "City of Greater St. Louis" and was able to successfully petition the state legislature to submit the proposal to a statewide vote in 1930.[14]

As in 1926, public sentiment proved to be violently divided. Outstate farmers seemed to be generally confused and apathetic about the issue. City businesses and the newspapers were for federation, but city politicians were generally against it, fearing a loss of clout. For the most part, the strongest suburban support came from inner ring, affluent suburbs such as University City and Richmond Heights. On the other hand, the greatest opposition came from the farmers in St. Louis County, as well as residents of detached suburbs, especially those with their own histories like Roessel's own Webster Groves. Indeed, the editor of the Webster Groves newspaper—the same editor who feared in 1926 that consolidation would bring pool halls and soda parlors to the city—suggested that if the petition passed, city police would replace local ones and that Webster Groves would end up like St. Louis where "gangsters run wild, murderers go uncaught and banks are robbed without any arrests."[15] In the end, the voters agreed with the Webster Groves editor. While the proposal won in the city and in a few close-in suburbs, it lost outstate and in most suburbs. In St. Louis County, the vote went 60/40 against. While the framers of the plan could have done more to specify what powers the new federative city would have, suburban residents were not ready to relinquish power to address regional interests in 1930.[16] Despite the fact that it took longer, federation plans were defeated in Pittsburgh and Cleveland as well.[17]

THE REGIONAL PLAN—A DIFFERENT APPROACH

By the mid-1920s, many regionalists across the country had resigned themselves to the improbability that any type of metropolitan consolidation would ever come about—at least not any time soon. Yet realizing that the automobile and industrialization had produced a new urban form almost overnight and that this "new" city presented new challenges and opportunities which demanded to be addressed, these "pragmatic" regionalists attempted to formulate an alternative strategy to consolidation and/or federation to confront the new metropolis. For those regionalists who were involved with or attracted to the new field of urban planning, they did not have far to look. Familiar with the concept of the comprehensive plan where cities would attempt to formulate an integrated or comprehensive tactical direction for the city as



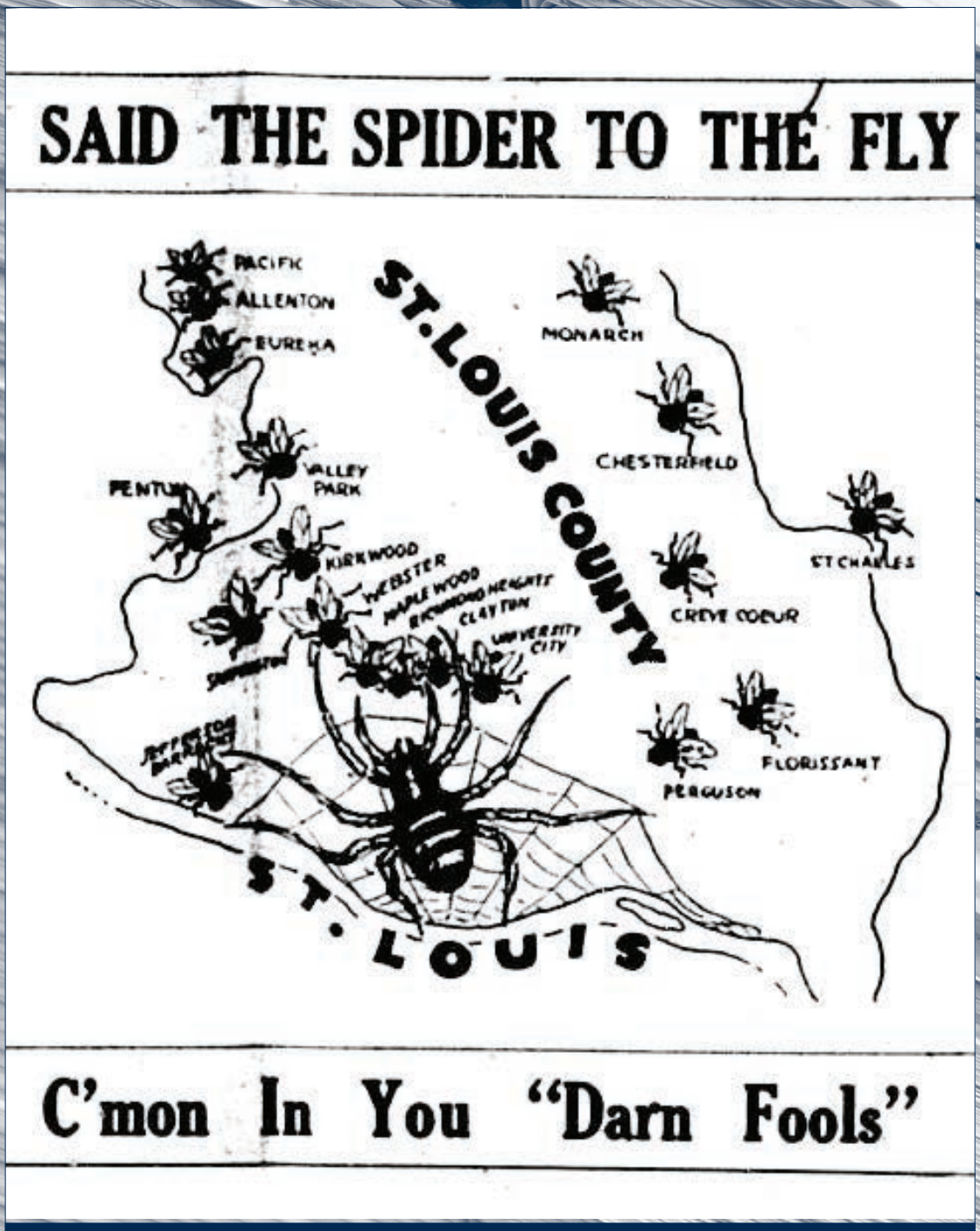
Annexation the Last Hope
Of a Drowning City Budget

What Can the City of St. Louis Give to the County That We Would Not Have to Pay for Ourselves?

R. W. NOLEN
CANDIDATE FOR
P. A'S. OFFICE

WAS FORMER SHERIFF OF MONROE COUNTY MISSOURI

Critics accused St. Louis city officials of nefariously proposing annexation to reap revenues from the burgeoning county.
(Photo: *St. Louis County Leader*, June 18, 1926; State Historical Society of Missouri)



In 1926, opponents of increased regionalism thought the city of St. Louis would swallow up the county and its interests, like a spider catching flies in its web.

(Photo: *St. Louis County Leader*, October 15, 1926; State Historical Society of Missouri)

Opponents of annexation thought taxes would increase, robbing citizens of hard-earned dollars during the Great Depression like a thug waiting to mug them from a dark alley.

(Photo: *St. Louis County Watchman Advocate*, May 10, 1930; State Historical Society of Missouri)

a whole for twenty years or more, these planning proponents advocated generating a comprehensive plan for the entire region and not just the central city. Such an approach would not deny local identity or control, but would seek to coordinate the actions and policies of counties and municipalities to address rationally metropolitan concerns common to the entire region.

The first efforts at formulating regional plans came on the coasts in the early 1920s. New York and Los Angeles began working on regional plans at almost the same time. In New York, the pressure came from the realization that the functional city stretched across three states. Transportation, sanitation, and economic activities of this vast region demanded coordination. In Los Angeles, the automobile had stimulated explosive growth in the 1910s and early 1920s that had overwhelmed the abilities of the suburban communities to provide adequate services. For both cities, something simply had to be done.

What is interesting is that St. Louis' own Harland Bartholomew was part of both regions' "all-star" planning teams. Seen as path-breaking work, these first two regional plans attracted "who was who" in the planning field in the early twenties. Although he was the youngest planner on both these teams, it was not surprising that Bartholomew had been sought to be a part of these massive undertakings. He and his firm already had an extensive list of completed, comprehensive plans around the country.

Due to the stir that both plans caused, other regions across the country drafted plans modeled after those of New York and Los Angeles. The most ambitious of this second wave of regional plans was prepared by San Francisco. The Regional Plan Association of San Francisco Bay Counties hired Bartholomew to coordinate the regional plan for the nine-county Bay Area. The first stage of the planning process was a report on the physical challenges facing the region. The report that Bartholomew generated became a template for regional planners across the country. Later, Bay Area planners would discover that he had identified virtually every environmental and infrastructural challenge that would plague the Bay Area for the next forty years.[18]

ST. LOUIS' ENTRY INTO REGIONAL PLANNING

While Bartholomew was quite active in regional planning throughout the 1920s, it was not until the end of the decade that St. Louis made its first foray into this new field with the formation of the St. Louis Regional Planning Federation in 1929. But, this new entity was essentially stillborn due to the onslaught of the Great Depression. Yet it was the Depression and the New Deal that brought the Federation and St. Louis regional planning to the forefront.

When Franklin Roosevelt came into office in 1933, he came with a long familiarity with and commitment to planning. Although many conservatives were convinced that he was intent on instituting Soviet-style state planning, Roosevelt was primarily interested in using planning to support rather than replace the market and free enterprise. Even the National Industrial Recovery Act, which created the National Recovery Administration (NRA) with its wage and price controls, was meant to save the existing business structure in the United States. But it was the Recovery Act that vastly expanded planning in American life in the thirties and was the force that brought regional planning to life in St. Louis.

Just days before the 1930 election, the *St. Louis County Leader* ran this cartoon on the front page, featuring a taxpayer fleeing the Four Horsemen of the annexation apocalypse, including threats of property confiscation.

(Photo: *St. Louis County Leader*, October 31, 1930; State Historical Society of Missouri)

The tie between the Recovery Act and planning was Title II of the act that established the Public Works Administration (PWA), which was designed to carry out and stimulate work relief projects. Harold Ickes, who was Secretary of the Interior and was over the agency in which the PWA was placed, created the National Planning Board to advise him on the selection and scheduling of these projects. While Ickes saw the immediate use of the Board in advising him on work relief projects, he encouraged the Board to stimulate state and local planning.

One of the initiatives which the Board eventually undertook was the formation of a subcommittee to oversee metropolitan or regional planning projects. Before the ink was dry authorizing the project, the St. Louis Federation applied for funds to support the preparation of a regional or metropolitan plan. At the Board's suggestion, the Federation was transformed into a commission that had representatives from the city government and seven surrounding counties. The first act of this new commission was hiring Bartholomew to write a preliminary report on regional conditions and recommendations. After this preliminary report, the commission authorized a follow-up report by Bartholomew, released in 1936. In this report, Bartholomew recommended forming a five-member agency that would be established by the Illinois and Missouri legislatures and would direct development throughout the bi-state region. Naturally, having been an active foot soldier in the regional planning movement for fifteen years, Bartholomew went on to recommend that one of the first acts of this new agency should be the preparation and adoption of a metropolitan plan. The emphasis of this plan, Bartholomew suggested, would be on sanitation, transportation, highways, and recreation problems facing the St. Louis metropolitan region.[19] It looked like Bartholomew was finally on his way to drafting a regional plan for his own region.

THE METROPOLITAN PLAN ASSOCIATION AND THE 1948 GUIDE PLAN

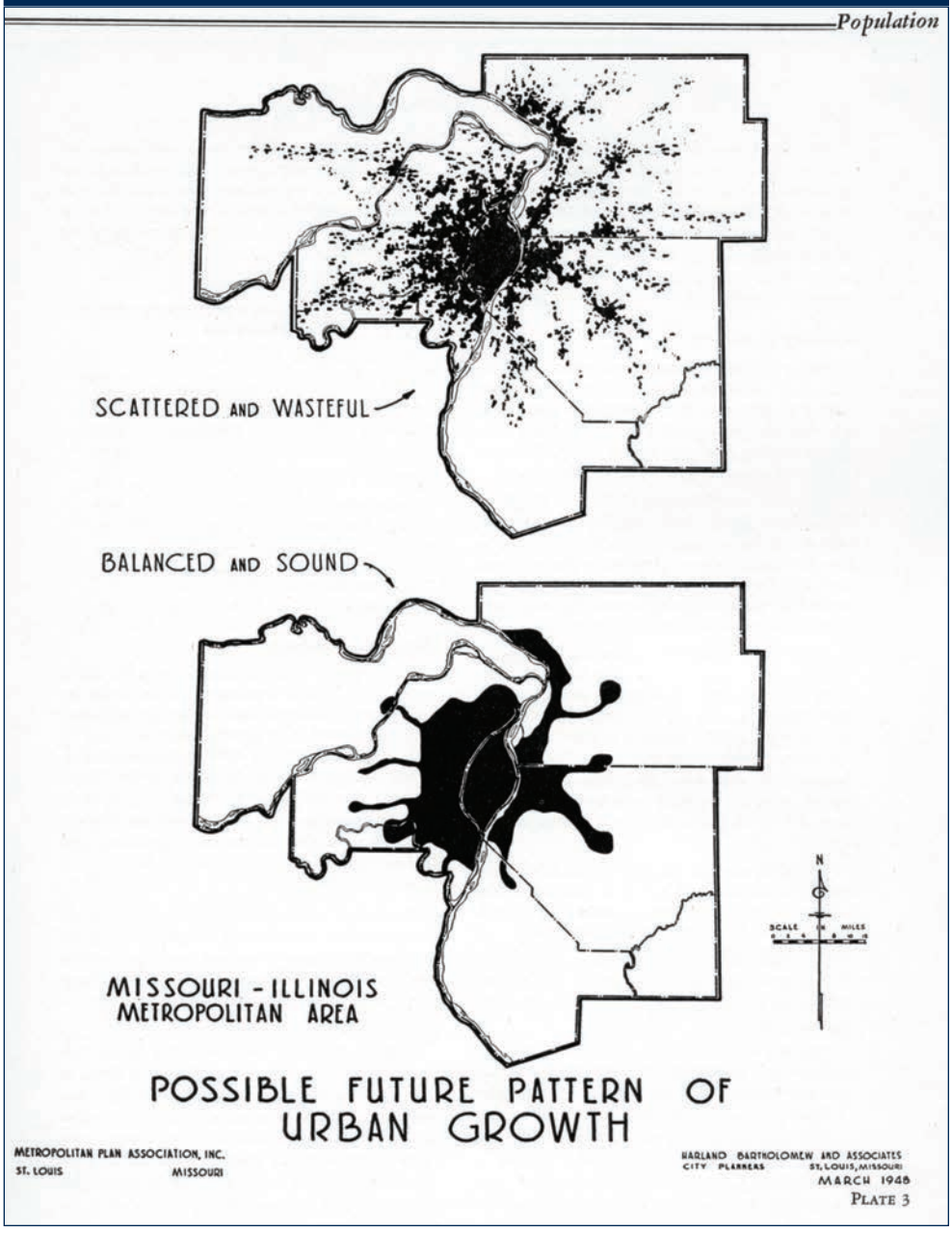
But again, Bartholomew was thwarted by the timing of events. A new economic downturn and World War II got in his way. As it did for cities around the country, the recession of 1937 and the onset of the war derailed planning in St. Louis. While the New Deal had stimulated planning activity, FDR's efforts to reduce spending and the mounting deficit in his second term took away the one source of planning support during the Great Depression. Although World War II "cured" the Depression, the war diverted all federal monies away from unnecessary social or economic activities, like planning, which were not seen as crucial to the war effort or maintaining the home front.

However, the war would ultimately lead many people to take city and regional planning even more seriously. The devastation of European cities, especially those in England that had withstood tremendous bombing, forced Europeans to contemplate how they were going to restructure their cities even before the end of the war. In America, a similar frame of mind was emerging. By the end of the war, most American cities had experienced a fifteen-year hiatus from development, and urban areas that had started to show signs of disinvestment before the Depression were in a catastrophic state of disrepair. Moreover, what building had occurred during the war had taken place in the suburbs, straining even further the overburdened regional services. Like their European colleagues, American planners were looking at the end of the war as both an imperative and an opportunity to rebuild the metropolis.

Most Americans know the story of "urban renewal" that brought about public housing, central city freeways, and massive clearance of perceived slum areas in the postwar period. What most people

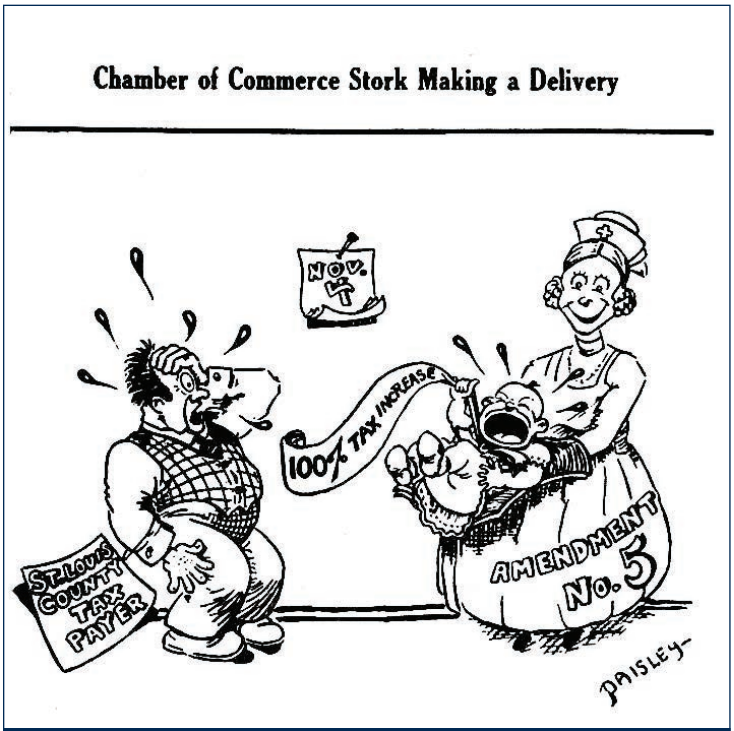
Bartholomew was one of the first planners to use the word "sprawl" to describe haphazard suburban growth. What he proposed instead was managed metropolitan growth where new development would be funneled out along transportation and infrastructure corridors that would maximize the use of resources and preserve open space—an idea advocated by today's environmentalists.

(Photo: Guide plan, Missouri-Illinois metropolitan area...1948, Harland Bartholomew and Associates, p. 15. University Archives, Department of Special Collections, Washington University Libraries)



When the City of St. Louis acquired Lambert Field in 1927, it became the first municipal airport in the United States. This terminal at Lambert, designed by Minoru Yamasaki, was completed in 1956. (Photo: Christopher Duggan, Lindenwood University)

do not know is that Bartholomew was a central character in this story in St. Louis and elsewhere. His 1947 Comprehensive Plan for St. Louis is perhaps the most famous—some critics would say infamous—blueprint for rebuilding the American inner city.[20] It was this document that laid the foundation for projects like the Mill Creek Redevelopment Project, the Pruitt-Igoe Public Housing Project (though Bartholomew did not approve of high-rise public housing), and the expansion of Highway U.S. 40 in the 1950s and 1960s.[21]



Cartoons such as this one appeared in two St. Louis county newspapers on the same day, threatening a major tax increase through annexation that would be as unexpected as a crying newborn.
(Photo: *St. Louis County Watchman Advocate* and *St. Louis County Leader*, October 24, 1930; State Historical Society of Missouri)

What most people do not realize is that planners of the period, especially Bartholomew, saw the remaking of the American city as a two-stage process. Like many of his fellow planners of the period, Bartholomew felt that the central cities needed to be rebuilt, but this had to be accompanied by the simultaneous restructuring of the periphery. If suburban growth was not controlled, the infrastructure needs alone of the new developments would overwhelm municipal governance and resources. In effect, each region would be building a parallel city, each with its own separate sewers, water system, highways, utilities, and public buildings. As they did so, regions would be not only shortchanging the present, but the future, too. In Bartholomew's mind, the impending post-war situation convinced him even more of something that he had been thinking for twenty years. The new city demanded not only metropolitan planning but also the power to implement those plans on a regional basis.

Consequently, Bartholomew was undoubtedly behind the creation of a new regional citizens' group in St. Louis in 1944 called the Metropolitan Plan Association (MPA), which took up his call in the 1936 report for a new governing body that would direct regional development and planning. While it took three years to accomplish, the first order of business for the MPA was lobbying for legislation in both Illinois and Missouri to create an interim commission to "prepare a program of organization and administration whereby the affected communities of the area may most effectively plan and guide the development of the area in matters which are of concern to the area as a whole." The ultimate goal of Bartholomew and the MPA was for this commission to study "the advisability of establishing a permanent bi-state administrative body."[22]

Yet feeling that time was of the essence and that it might take years for this bi-state agency to be created, Bartholomew and the MPA felt it was necessary to outline what a metropolitan plan was and what this proposed bi-state agency might look like. So almost immediately after passage of the legislation, MPA hired HBA to

prepare a "guide plan" for the St. Louis metropolitan region.

As Malcolm Elliott, the president of the Association, explained in his foreword, the purpose of the plan was "to bring into clearer focus the major metropolitan-wide development problems." Moreover, it was intended to show "the proper relationship of these problems to each other and to the development of the whole metropolitan area as integral parts of one great interdependent economic unit." However, Elliott argued, the main value of the guide plan was in giving the new Missouri-Illinois Metropolitan Development Commission "a starting-point for its deliberations and in giving them a reliable and comprehensive view of the metropolitan situation."[23]

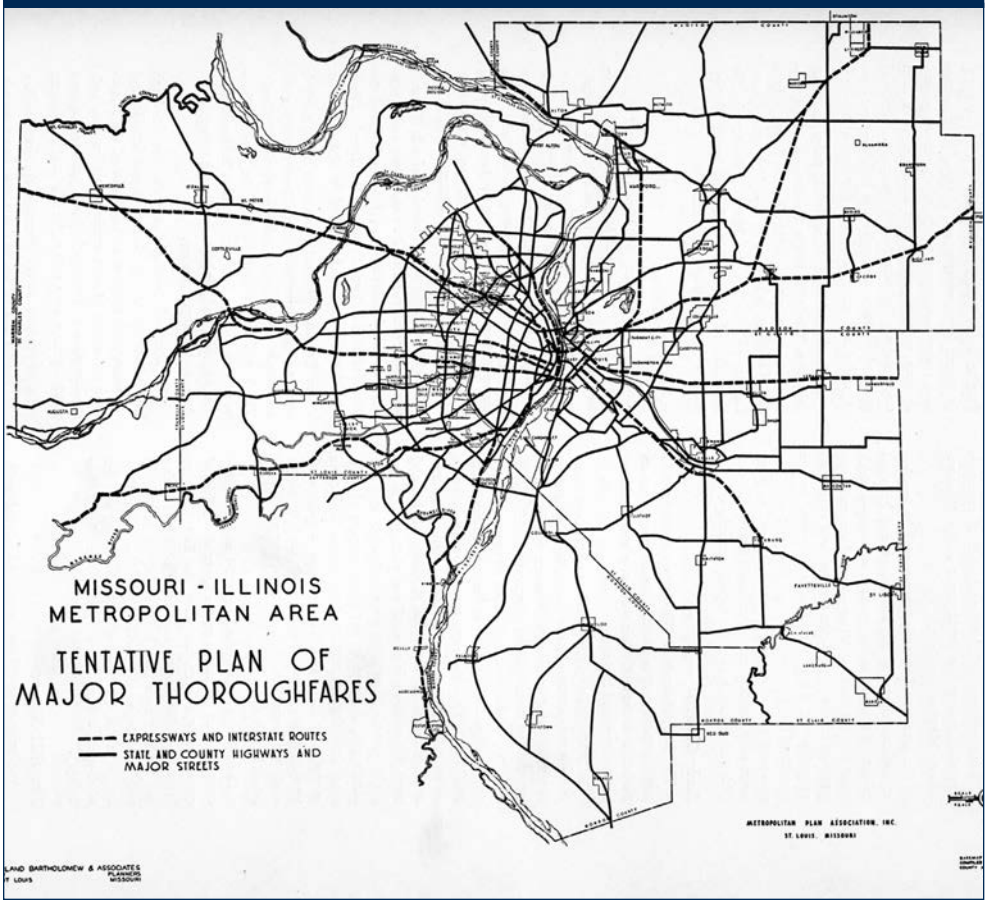
The plan was a concise document. It was only 54 pages long including introductory material plus plats and tables. The body of the plan was divided into four main sections that grouped the reports of the fourteen committees into which the MPA was divided, as well as a concluding essay on the function of the proposed permanent metropolitan agency.

But before discussing his main planning elements, Bartholomew opened the plan by laying the foundation of why a regional plan was necessary in the first place. He most wanted to convince St. Louisans, both those living in the city and those who resided in the suburbs, that the study area of the plan (which included the City of St. Louis plus St. Charles, St. Louis, Madison, Monroe, and St. Clair counties) was "basically just one big city." As Bartholomew explained in his introductory essay, the region had become an "urban community grown large," because of its geographical location, "unusual transportation facilities," natural resources, and the "enterprise of its people." But for Bartholomew this was both a good thing and a bad thing. Although the St. Louis region had become one of the largest metropolises in America, "growth brings change," Bartholomew reminded his readers. This region had outgrown the facilities that had served the pre-automotive city. What this meant, according to Bartholomew, was that these facilities had to "be re-designed and supplemented in scale with the changing city—the modern metropolitan community."[24]

Bartholomew went on to ask rhetorically, "Why hasn't this been done already?" He then responded, "The plain answer [was] that our governmental machinery has not expanded as rapidly as the physical growth." Instead of having one structure that could address the needs of the metropolitan area as a whole, a "multiplicity of governmental units" existed. In Bartholomew's mind, this had resulted in St. Louis becoming a disjointed, fragmented mess. "Plans for a great city," he told his fellow Greater St. Louisans, "cannot be prepared by a convention of communities." The modern metropolis required planning that was metropolitan in scope and perspective. "We need a new approach," he said, one that would lead to "big plans for the new big city." But for Bartholomew, planning was not enough. Plans, in and of themselves, would not allow the new, larger St. Louis to realize its true potential. According to Bartholomew, regional plans would be successful only if "certain administrative authority [was] established at the metropolitan level."[25]

Bartholomew was a major participant in the interstate movement from its inception in the 1930s to the passage of the National Defense Highway Act of 1956. Bartholomew's original plan called for more interstate and freeway coverage for Metro East, but no beltway (like I-270/I-255), arguing that beltways stimulate metropolitan sprawl rather than the "finger" growth pattern suggested here.

(Photo: Guide plan, Missouri-Illinois metropolitan area…1948, Harland Bartholomew and Associates, p. 25. University Archives, Department of Special Collections, Washington University Libraries)

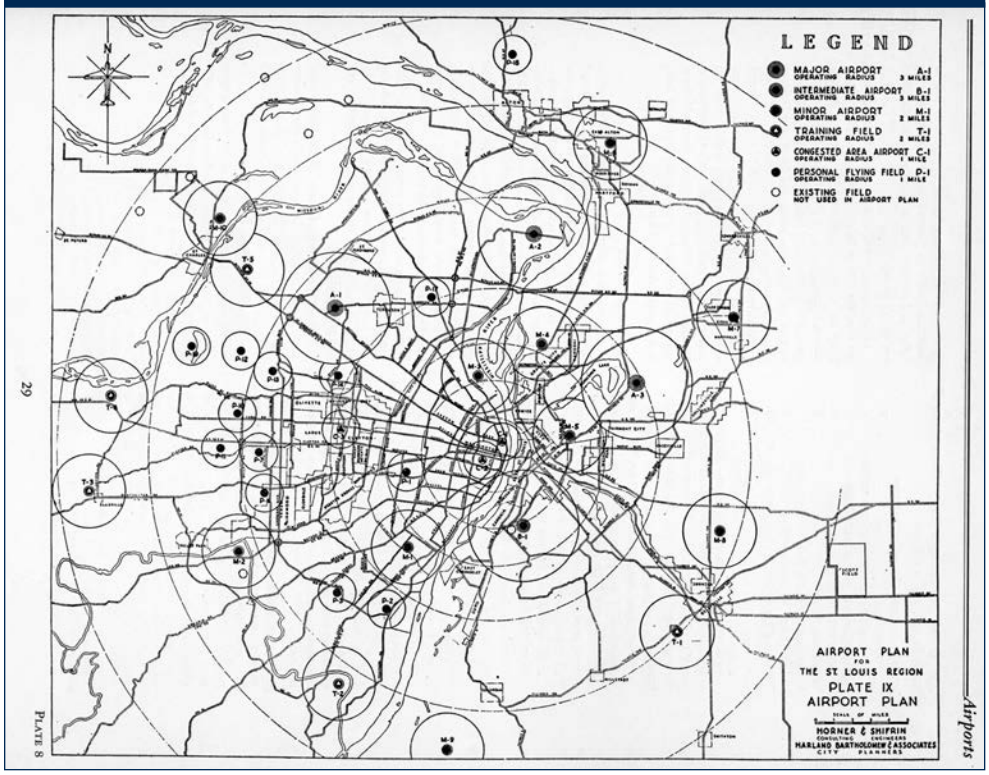


The problem for Bartholomew was that "city growth [was] not always advantageous." Although growth almost always led to increases in the number of available jobs and to commercial expansion, metropolitan growth could also lead to economic and social problems. Growth could cause a loss of affordable housing for the poor, traffic congestion, pollution, and myriad other problems. However, Bartholomew told his readers, "These are essentially difficulties that spring from neglect and poor planning rather than from basic faults inherent in the volume of growth." But, according to Bartholomew, growth did not have to result in a decline in the quality of life. Indeed, for him, the St. Louis region could realize its full potential by offering "its citizens definitely improved social and economic opportunities and gains." And for him, this could only occur if planning took place at a "scale commensurate with future needs and opportunities. It must be at the metropolitan level." If the new St. Louis did not plan at a regional level, Bartholomew warned, it would end up not only being a "vast heterogeneous sprawl," its continued growth, both in terms of population and economic strength, would also be choked off.[26]

Bartholomew was hardly some wild-eyed dreamer. He was every bit the realist and political pragmatist. What he had in mind was not a utopian neverland where a metropolitan super-government made all decisions according to a grand scheme (in fact, he had testified before the Board of Freeholders against consolidation in 1926).[27] Bartholomew knew that St.

Although many St. Louisans now laugh at Bartholomew's plan for 35 regional airports first suggested in his 1947 St. Louis Comprehensive Plan, he was merely trying to provide for the possibility of helicopters becoming commonplace. While that didn't come to pass, he was actually quite close to estimating the number of airports that were built.

(Photo: Guide plan, Missouri-Illinois metropolitan area…1948, Harland Bartholomew and Associates, p. 29. University Archives, Department of Special Collections, Washington University Libraries)



Louisans—whether they were suburbanites or from the city—would never totally give up local control. Harking back to Reed and Roessel and the battle of 1930, Bartholomew framed his argument in terms of a balance between local and metropolitan-wide governance and planning. Likening neighborhoods and local communities to human cells, Bartholomew urged his fellow St. Louisans to see that "while the human body depends upon the health of its multitudinous cells, there are also vital single organs such as the heart, the lungs and the arteries, for example, upon which the body is equally dependent for maintenance and growth." For him, the parallel was obvious. "Unified, integrated functioning of both local and major organic parts," Bartholomew maintained, "is as essential to the large urban community as to the human body." Local communities should have control over their schools and parks, as well as their homes and local shopping areas. But the overall design and function of the metropolitan area would have to be regionally planned and governed because the whole metropolitan area would be affected. Bartholomew's message was clear. There were certain facilities that the whole community depended upon. "If good," he told St. Louisans, "the community will benefit. If not the community will be noticeably handicapped or even permanently crippled."[28]

None of Bartholomew's actual planning proposals were all that surprising in the context of a career that had already spanned almost forty years. At the heart of his regional planning strategy—as it was for his planning paradigm—was comprehensive land use and zoning plans. Just like in a city comprehensive plan, the main goal of the planner was to direct where growth was to take place and to explain why. While contemporary planners and regional policy experts are constantly talking about "suburban sprawl," it was a term that Bartholomew used sixty years ago for virtually the same reasons. Although he did not use the term "sustainability," Bartholomew was talking about essentially the same thing. However, for him, the bottom line was not environmental, but economic. The region could not continue to provide adequate services and to maintain a desirable quality of life if developers were allowed to build in a scattershot fashion. The key, according to Bartholomew, was to force suburban growth outward along well defined corridors that would maximize the investment in infrastructure.

This controlled pattern of growth could be achieved in two ways. The first was through zoning. It would not be enough for the planner to color in maps that showed where certain activities were supposed to take place. There would have to be the means of making sure that this is what would happen. Zoning gave the land use plan its power. Just as in cities (Bartholomew introduced the second major zoning ordinance in the country in 1919), a regional zoning ordinance would mandate with the force of law what activities would take place where. But if zoning ordinances were not grounded in a land use plan (as was the case in 1948 and now in 2009), some municipalities would have their own zoning ordinances while others would have none. The result would be chaos instead of order. Consequently, Bartholomew believed that there could only be one regional zoning ordinance and that it would have to be tied to a well-crafted land use plan.[29]

The other tool that planners had in coercing the region to develop these clearly articulated corridors, Bartholomew explained, was its transportation plan. For Bartholomew, the skeleton of the new metropolitan city was its transportation system, even more so than it had been for the walking and streetcar cities. Where it placed its highways, mass transit, rail system, and, in 1948, its airports, dictated what form the region would take and where everything would be situated.

Bartholomew has been mocked because of his scheme for 35 airports, hedging his bets that local personal air travel might become a reality. But the key component of his transportation plan was his interstate highway plan. A major planner in the debate on the national highway system during the New Deal, Bartholomew had been thinking about the proper placement of the highways for years. Building upon his original radial design, which he developed in the teens, Bartholomew laid out the region's highways like fingers on a hand. Emanating from the central city, the interstates would direct the region's growth inside clearly defined corridors. While Bartholomew provided for existing circumferential beltways (essentially Lindbergh), these were secondary in his plan. They were meant to ease downtown congestion by diverting interurban traffic around the metropolitan core. Unlike later HBA metropolitan plans (and even Bartholomew's later metropolitan Washington, D.C. plan) which called for circumferential freeways, the 1948 plan did not provide for an I-270/I-255 equivalent. This is important because most contemporary urban planners argue that such circumferential beltways do not divert inter-urban traffic as much as pull metropolitan population out towards them producing the scattershot pattern that Bartholomew spoke against.[30]

Another interesting point of Bartholomew's proposal is that he placed much more emphasis on the Illinois side of the Mississippi

than most regional plans have since. His Tentative Plan of Major Thoroughfares provided for expressways to both Belleville and Alton (via a north-south distributor just east of Horseshoe Lake) in addition to what became I-64 and I-70/I-55. One could easily argue that if these had indeed come to be, the region would have developed in a more balanced bi-state fashion—a direction that Bartholomew clearly favored.[31]

Apart from his highway plan, the aspect of the 1948 plan that had the most long-term impact on the region was Bartholomew's scheme for improving the region's water and sewer systems. St. Louisans could pretend that municipal borders fenced off housing and economic activities into little self-contained fiefdoms, but that was impossible with water and sewage. Gravity and currents held sway here. If some areas had sewers and pollution controls and others did not, everyone was affected. Moreover, the lack of coordination could not be glossed over by simply arguing that it was a matter of local preference or control. It was a matter of health, plain and simple. Sewage seeping into the drinking water, St. Louisans knew all-too-well from the cholera epidemic that had occurred a hundred years earlier, could be deadly. It was not too surprising then that one of first tangible results of the guide plan was the formation of the Metropolitan Sewer District (MSD) in the late 1950s which was created to coordinate and unify the region's sewer systems into one centralized system which became a model for metropolitan regions across the country.

The last major planning element of the guide plan, Bartholomew's regional housing proposal, was the most controversial—both then and now. In his 1947 comprehensive plan for the City of St. Louis, Bartholomew had outlined his strategy for addressing the mounting problem of deteriorated housing in the city. Expanding on ideas that he had been developing since the thirties, Bartholomew called for the city to demolish huge sections of what he called "obsolete" housing—a strategy which planners and urban policy makers have been hotly debating ever since.

For Bartholomew, this aspect of his housing plan was perhaps the least important. What was much more important to him was preserving the city's good housing stock and tackling St. Louis' housing problems in a regional manner. As Bartholomew told all St. Louisans, "The problem of slum areas cannot be solved merely by clearing a localized slum section in one city and forcing the residents to move into another slum in an adjoining community, or into unincorporated areas, nor can the problems be solved by the construction of cheap temporary houses which in a few years will become new slums." Maybe most of the deteriorated housing was in either St. Louis or East St. Louis, but it was the problem of the whole region and, according to Bartholomew, it had to be dealt with regionally. What this meant for him was that there would have to be a coordinated housing program that would establish uniform housing guidelines across the region to prevent new slums (something that developers would not like) and that the blighted areas would have to be rezoned to prevent them from slipping back to being blighted.[32]

While he did not fully flesh out the ramifications of this last aspect of his strategy, the implications were clear. If some poor people were going to be displaced by urban rehabilitation, then they would have to be relocated someplace else. Though Bartholomew did not say it, a consolidated approach to regional housing problems would require that all areas do their fair share in providing adequate housing for all St. Louisans—a concept that is still being battled over throughout the region.

The key component of the guide plan for Bartholomew was not the planning elements; it was how they were to be implemented. What he wanted and what he had been pushing for twenty years was a metropolitan planning agency that would have the power to coordinate planning activity across the region as well as the means to undertake projects that required pooling the resources of the entire region.

This agency Bartholomew was proposing was not something totally of his own creation. What had been guiding his thinking since the mid-twenties was the formation of a planning agency similar to the New York Port Authority. Formed in 1921, the Port Authority coordinated transportation infrastructure in the New York-New Jersey Port District. While Bartholomew's proposed bi-state agency would also plan and develop transportation facilities, it would go beyond the New York Port Authority in that it would assume direct control of all planning and implementation of projects metropolitan in scope. Not only would it oversee the airport, the river docks, and regional mass transit like the Port Authority, Bartholomew's bi-state agency would also oversee land use/zoning, highway placement, economic development, housing codes, water/sewage treatment, and park systems for the entire region. As Bartholomew told St. Louisans, this new agency would "give better coordination of and direction to growth, and to foster if not to provide certain types of improvements which are peculiarly metropolitan in character."[33]

Bartholomew knew what he was proposing would not be easy. Because the real St. Louis crossed state boundaries, it would have to be legislated through an "interstate compact" and approved by the federal government, "which has no inconsiderable interest at stake here." On the other hand, Bartholomew pointed out, these "interstate compacts have been adopted in several other metropolitan areas bisected by state boundary lines." What Bartholomew knew St. Louisans really needed to be convinced of was that the City of St. Louis was not making some power play or that this new government would not be all powerful, obliterating the role and identity of local municipalities as it had tried to do in 1926. "The scope and function of any new metropolitan agency," Bartholomew asserted, "must be limited to the more dominant needs." Just like the national government and its relationship to the states, this new agency would not supplant local control, but try to coordinate and support the actions of local municipalities. It would "exercise full administrative authority," Bartholomew went on to say, "only when such authority is lacking or is not otherwise adequately provided."[34]

Having laid out the parameters of his proposed new agency, Bartholomew's next task was to outline what its main functions were to be. According to him, this new agency would have three main powers. Its primary function would be to prepare and maintain an area-wide plan that would have all the elements of a traditional city comprehensive plan such as land use, transportation, water/sewage, park/recreation facilities, and housing. Again, trying to reassure his readers, Bartholomew maintained that the "making of such plans will not interfere with local plan commissions but should serve to stimulate their endeavors and give much better orientation to their work."[35]

The second role of this new regional agency would be "to assist local governmental agencies in improving and extending *facilities and services of metropolitan significance*." [italics his] According to Bartholomew, the purpose of the new agency here was to be a facilitator. It would enable the municipalities to do those things they could not do by themselves. The example Bartholomew gave was sewerage and drainage. The task of removing sewage did not end at a municipality's borders. Sewage removal was something that "overlap[ped] local municipal boundaries which a metropolitan agency could assist in planning and organizing."[36]

The third role of Bartholomew's proposed agency was the most controversial. This function not only involved planning and coordinating, but it also involved the actual construction, control, and ownership of certain types of facilities that "were of a special metropolitan character." Not only did he want this agency to build and operate traditional forms of public infrastructure like bridges and tunnels, he also wanted it to construct and run facilities that had, up until that point, been locally and privately owned such as suburban commuter lines and airports.[37]

For a lifetime Republican and a proponent of private enterprise, Bartholomew was calling upon his fellow St. Louisans to give up a tremendous amount of private control and ownership to this new agency. But in his mind, it had to be done. "Large scale operations in any field of human endeavor whether in business, in war, or in government require centralized planning and direction," Bartholomew said. According to him, St. Louis had no choice. "The alternative is chaos and waste, if not failure and defeat." To Bartholomew, there were two paths open to St. Louisans. Either St. Louis could realize its "manifest destiny" for greatness by working as one region, or it could continue to become more and more fragmented and slip into the ranks of second tier among the new emerging cities.[38]

UNFULFILLED PROMISE

While some St. Louisans today like to mock themselves by joking about the region's lack of planning prowess, what is amazing from the viewpoint of a generation removed is not how much of what Bartholomew proposed did not come to pass, but how much did. Literally every community in metropolitan St. Louis is planned to some degree and practices zoning. Metro St. Louis operates most mass transit throughout the region. The major interstates roughly follow Bartholomew's suggested placements. The East-West Gateway Coordinating Council controls much of the region's transportation spending. The Metropolitan Sewer District (MSD) was created in 1959 to coordinate the region's sewer system and has been a model for the rest of the country. In recent years, the region has expanded the zoo-museum district to be regional in scope and to include several cultural organizations like the Missouri Historical Society, as well as developing a regional system of open space and trails through an organization called Great Rivers Greenway. Even Bartholomew's airport plan has largely come to be. The region has two major airports (even though one is not needed) and actually has more than 50 airports if the region's heliports are included.[39] But the main legacy of the plan is that the metropolitan planning agency that Bartholomew had called for came to be. Authorized by Congress in 1950, the compact between Illinois and Missouri gave the Bi-State Redevelopment Authority broad planning and implementation powers over a wide spectrum of regional facilities and activities.[40] In short, by the end of the 1950s, it appeared that St. Louis was following MPA's dictate of 1954 (the year after Bartholomew had left St. Louis to promote regionalism in Washington, D.C.) that St. Louis "must heed the injunction of the late Daniel Burnham when he told the people of Chicago, 'Make no little plans.'" [41]

But even big plans do not always "go according to plan." In many ways, the St. Louis region became even more disjointed, more fragmented, and more sprawling after 1960 than it was before. Efforts at achieving some type of federated government in St. Louis failed in 1962 and 1987.[42] The construction of circumferential beltways (I-250/I-255) made population dispersal even more scattered. Competing use of tax incentives produced even greater disparities between communities in terms of resources. By the late 1980s, municipal mayors and county officials were openly feuding.

So what happened? It quickly became apparent that the super agency that Illinois and Missouri had created and Congress had authorized was not as super as it was first imagined. Congress had limited the powers of the agency as it applied to federal interests and stipulated that any extension of power had to be approved by Congress. But the biggest problem that the agency faced was the limitation on its ability to sell bonds to finance projects. As a result, it was never able to accomplish all of the things it was meant to and spent most of its early years begging for more power from both the state legislatures and from Congress.[43] After failing to push through the new airport in the 1970s, Bi-State became the primary operating agency for mass transit in the 1980s. Though it achieved a major success in the 1990s with the creation of the first leg of the "Metrolink" light rail system, Bi-State was officially renamed "Metro," and had its mission limited to just mass transit. Even here, the scope of Bartholomew's vision has been diminished. Losing an ugly court case involving cost overruns with the most recent leg of the Metrolink system and failing at the polls to find additional funding support for the agency, Metro has reduced its service by a third during 2008.[44]

While some St. Louisans today like to mock themselves by joking about the region's lack of planning prowess, what is amazing from the viewpoint of a generation removed is not how much of what Bartholomew proposed did not come to pass, but how much did.

Realizing that Bi-State was not going to save the region, St. Louis regionalists tried to come up with yet another agency in the mid-1960s. In 1965, jumping on new federal legislation, the St. Louis region created the first a formal confederation of municipal governments (COG), the East-West Gateway Coordinating Council, in the nation. Basically a council of governments,

Fifty years ahead of his time, Bartholomew envisioned an urban rail system like Metrolink that would connect different regions together. (Photo: Lindenwood University)

East-West Gateway represents St. Louis City, plus St. Louis, St. Charles, Franklin, and Jefferson counties in Missouri, as well as St. Clair, Madison, and Monroe counties in Illinois. Although the federal government has given COGs like East-West Gateway a tremendous amount of power over federal monies, especially transportation funds, East-West Gateway has lacked from the very beginning the necessary power to sell bonds or the authority to force implementation of its plans. Moreover, because it is a council of governments, with its board dominated by elected politicians, it has lacked the political will to call for sweeping changes or new powers.[45]

As a result of these limited regional initiatives—61 years after Harland Bartholomew sketched out what a regional plan might look like and might do—the region is still waiting for its first real comprehensive plan for the region or an agency that has the power to realize a regional strategy. So, while other regions have adopted Bartholomew's vision for a coordinated approach to regional issues, St. Louis continues to find itself flailing away at piecemeal solutions to regional problems. Consequently, the "real" St. Louis falls farther and farther behind more successful regions. Able to pool their resources more effectively through meaningful planning, regions like Minneapolis, Denver, Seattle, and Portland have not only been able to expand economically and in terms of their population, but also have made themselves more livable in the process. Although St. Louisans have resisted regional planning in the name of community control, maybe it is time to heed Bartholomew's warning that if we do not take control of the region as a region "the alternative is chaos and waste, if not failure and defeat."

NOTES

1 See E. Terrence Jones, *Fragmented By Design: Why St. Louis Has So Many Governments* (St. Louis: Palmerston and Reed Publishing Company, 2000).

2 Ibid., 1-10. Also see James Neal Primm, *Lion of the Valley: St. Louis, Missouri,* 2nd edition (Boulder, Colorado: Pruett Publishing Company, 1990), 316-325.

3 For a discussion of the 1907 plan, see Mark Abbott, "A Document Changed America: The 1907 *A City Plan for St. Louis*" in *St. Louis Plans: The Ideal and the Real St. Louis,* Mark Tranel, ed., (St. Louis: The Missouri Historical Society Press, 2007).

4 Colin Gordon, *Mapping Decline: St. Louis and the Fate of the American City* (Philadelphia: University of Pennsylvania Press, 2008). For other perspectives on Bartholomew and his career, see Eldridge Lovelace, *Harland Bartholomew: His Contributions to American Urban Planning* (Urbana: University of Illinois Office of Printing Services, Printing Division, 1992) and Norman J. Johnson, "Harland Bartholomew: Precedent for the Profession" in *The American Planner* , 2nd ed., Donald A. Krueckeberg, ed., (New Brunswick, New Jersey: Center for Urban Policy Research, 1994).

5 Jon C. Teaford, *City and Suburb: The Political Fragmentation of Metropolitan America, 1850-1970* (Baltimore: The John Hopkins University Press, 1979), 32-36.

6 The City Plan Commission: St. Louis, MO (Harland Bartholomew: Engineer), *Problems of St. Louis: Being a Description, from the City Planning Standpoint, of Past and Present Tendencies of Growth with General Suggestions for Impending Issues and Necessary Future Improvements* (St. Louis: Nixon-Jones Printing, 1917), p. xix.

7 Ibid., xviii.

8 For a discussion of the impact of the automobile on the American city in the twenties and accelerating suburbanization, see Carl Abbott, *Urban America in the Modern Age: 1920 to the Present* (Arlington Heights, Illinois: Harlan Davidson, Inc., 1987), 36-45; Howard P. Chudacoff and Judith E. Smith, *The Evolution of American Urban Society,* 5th edition (Upper Saddle River, New Jersey: Prentice Hall, 2000), 217-224; and Jon C. Teaford, *The Twentieth-Century American City,* 2nd edition (Baltimore: The John Hopkins University Press, 1993), 62-74. Urban Geographers have felt for some time that irrespective of culture or period, people will not spend more than 45 minutes commuting to their employment. Therefore, a "walking city" would have a radius of 2.5 miles (25 blocks) or the distance that most people can walk in 45 minutes. A "Horse-drawn Streetcar City" would have a radius around 5 miles or 50 blocks. An "Electric Streetcar City" would be about 7.5 miles because that would be the distance the streetcar would go in 45 minutes. The Loop is approximately 7.5 miles (or 75 blocks) from downtown which took roughly 45 minutes. Hence the name. The streetcar would leave downtown, travel 45 minutes, the driver would take a short break, and then "loop" back.

Just like the jump between the horse-drawn and electric streetcars (which took place between 1890 and 1900) was about a fifty percent increase, the increase that the automobile brought was about another fifty percent. So if the early automotive city had a radius of about 10 miles or 100 blocks which in St. Louis would be in low 5 digit land (or where we got out of the rain), that put you in western Ladue (Richmond Heights is probably a little short). What I was thinking about was that the Brentwood exit is #31 on I-64 or 9 miles from the Arch. If you would just say Ladue or Webster Groves, you would be safe.

9 Teaford, *City and Suburb,* 102-103.

10 Ibid.

11 Ibid., 103-104.

12 Ibid., 106.

13 Ibid., 110-111.

14 Ibid., 120.

15 Ibid., 139-140.

16 Ibid., 144.

17 Ibid., 167.

18 Mel Scott, *American City Planning since 1890* (Berkeley: The University of California Press, 1971), 213-224.

19 Ibid., 308-310.

20 See City Plan Commission: St. Louis, MO (Harland Bartholomew Engineer), *Comprehensive Plan: St. Louis, Missouri* (1947).

21 Gordon takes a particularly scathing look at Bartholomew in *Mapping Decline* in terms of his ideas on blight, 124-125, and zoning, 118. For a more favorable treatment, see Abbott, "The 1947 *Comprehensive City Plan* and Harland Bartholomew's St. Louis" in *St. Louis Plans.*

22 Quoted in Scott, *American City Planning,* 444.

23 Harland Bartholomew and Associates, *Guide Plan Missouri-Illinois Metropolitan Area: An Over-All Analysis of the Major Metropolitan Development Problems with Some Tentative Proposals for their Solution. Prepared for the Metropolitan Plan Association, Inc., 915 Olive Street, St. Louis, MO* (St. Louis: Harland Bartholomew and Associates, 1948), 3.

24 Ibid.

25 Ibid.

26 Ibid.

27 City of St. Louis and St. Louis County, *Journal and Debates of the Board of Freeholders: Years 1925-1926* (St. Louis: Board of Freeholders, 1926), 43-45.

28 Harland Bartholomew and Associates, *Guide Plan,* 9.

29 Ibid., 12-19.

30 Ibid., 23-26.

31 Ibid., Plate 7, 25.

32 Ibid., 44.

33 Ibid., 48.

34 Ibid.

35 Ibid.

36 Ibid.

37 Ibid.

38 Ibid.

39 East-West Gateway Coordinating Council records show that there are at present 15 public and private airports in Greater St. Louis (e-mail transmission July 15, 2007). Google Maps indicate 36 heliports in the approximate area of metropolitan St. Louis.

40 Scott, *American City Planning*, 446-447.

41 Metropolitan Plan Association Inc., *Guide Book 1954: Metropolitan St. Louis Area Development* (St. Louis: Metropolitan Plan Association, 1954), 3.

42 See Jones, *Fragmented by Design,* 59-95.

43 Scott, *American City Planning*, 447. Interestingly, Bartholomew contended towards the end of his life that Bi-State was still the answer and had the power to actively plan the region if it so desired. See Mary Seematter, "An Interview with Harland Bartholomew," July 14, 1983 (St. Louis: Missouri Historical Society, 1983).

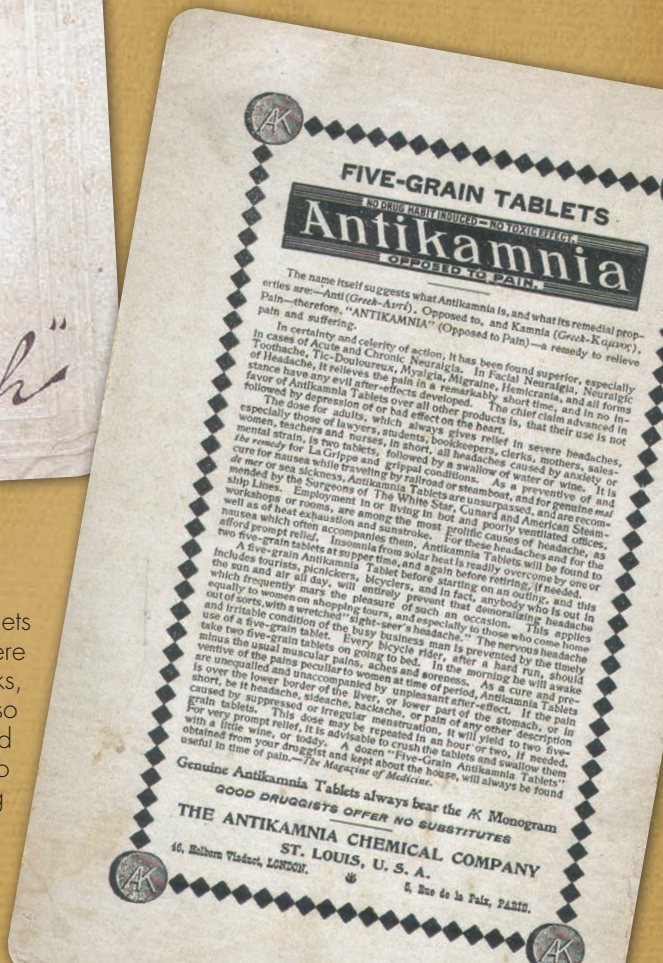
44 "In wake of Prop M's defeat, Metro increases fares," *St. Louis Beacon,* November 22, 2008 (http://www.stlbeacon.org/development/metro_fares_will_increase_in_2009).

45 Primm, *Lion of the Valley,* 509-510.

Against Pain

BY DAVID L. STRAIGHT

Although unusual for its sacrilegious image of a nun lifting her eyes towards the "heavenly" Antikamnia tablet, this 1898 large format (5" x 8") trading card is typical of the formula that combined collectable pictures with printed product information on the verso. Tracing their origins from seventeenth-century London trade cards, trading cards evolved into our modern business cards. Trade cards, in the original sense of the word, referred to cards distributed by business proprietors to announce their trade or line of work. With the development of inexpensive color printing in the late nineteenth century, collecting and trading of these attractive cards became a popular hobby. (Collection of the author)



The ailments that could be treated with one or two Antikamnia tablets ranged from toothache to Le Grippe (today, the flu) as well as "severe headaches, especially those of lawyers, students, bookkeepers, clerks, mothers, saleswomen, teachers, and nurses." The tablets were also recommended as a preventative "before starting on an outing, and this includes tourists, picnickers, bicyclers, and in fact, anybody who is out in the sun and air all day, will entirely prevent that demoralizing headache which frequently mars the pleasure of such an occasion" or for "women on shopping tours." (Collection of the author)

With palpable pain etched into her face and the enfolding wings of a powerful drug shielding the victim from the satanic serpent of her affliction, an 1899 Art Nouveau advertisement mailed to British physicians promoted the Antikamnia Chemical Company of St. Louis. Besides generating tremendous wealth, which allowed Frank A. Ruf an international reputation as an art collector, Antikamnia tablets and its advertising cards defined the power of the newly created Food and Drug Administration.

In the late 1880s, Louis E. Frost, a graduate of the St. Louis College of Pharmacy, and Frank A. Ruf, who had studied business at St. Benedict's College, met as drug store clerks and subsequently opened their own drug store. No evidence exists that either was ever a licensed pharmacist. After hitting upon a successful formula, they incorporated the Antikamnia Chemical Company to manufacture their analgesic, which combatted pain and incorporated antipyretic powder to reduce fever. The name, taken from two Greek words that combined to mean "opposed to pain," was trademarked in 1890. Financial reverses in other business ventures forced Frost to sell his Antikamnia shares in 1892. Combining a winning formula and good business instincts, Ruf continued the company with another partner. By 1894, the firm began using the monogrammed letters "AK" in its advertising and pressed them onto its tablets. Although Antikamnia tablets did not require a prescription, the company sold primarily to drug stores rather than to individuals. Most of its advertising, such as the cards illustrated here, was directed towards physicians, encouraging them to prescribe and recommend the tablets to their patients.

While the precise formula varied over time, the principle active ingredients in Antikamnia tablets remained the coal-tar derivative acetanilid combined with caffeine, sodium bicarbonate, and citric acid. Two German chemists discovered acetanilid in 1886. When testing its capacity for reducing pain and fever, they noted the side effect of cyanosis, a turning blue in the extremities from a lack of oxygen caused by depressed respiration and heart rate. Acetanilid was a legitimate pharmaceutical, listed in the National Formulary until 1955. However, it could be deadly when used carelessly; the first acetanilid-related deaths were reported in 1891. Antikamnia tablets were also formulated in combination with codeine, heroin, quinine, salol, and laxatives.

Because of the deaths associated with this drug, Antikamnia was one of the patent medicines particularly targeted by progressive consumer advocate Harvey W. Wiley, the first commissioner of the newly created Food and Drug Administration. The term "patent medicine" is somewhat of a misnomer, because few, if any, of the medicinal remedies marketed before the advent of the 1906 Pure Food and Drug laws were actually patented. Application for a patent would require, among other things, that manufacturers reveal the exact contents of their medicines and prove their claimed benefits. After the Food and Drug Administration ruled in 1907 that preparations containing acetanilid must be clearly labeled, the Antikamnia Company changed its formula for the domestic market, instead using acetaphenetidin, an acetanilid derivative. It then advertised that its product contained no acetanilid. However, the British market, still unregulated, continued to receive the original formula tablets. In 1910, U.S. marshals seized a shipment of tablets for being incorrectly labeled in violation of the Pure Food and Drug Act. The ensuing court case went all the way to the Supreme Court which ruled on January 5, 1914 (*U.S. v. Antikamnia Chemical Company*, 231 U.S. 654) that the Antikamnia Company had indeed violated the Pure Food and Drug Act both by not stating on its packaging that acetaphenetidin was a derivative of acetanilid and by the misleading advertising that the tablets contained no acetanilid. Beyond the impact on the Antikamnia Company, this ruling was a landmark in support of Progressive Era reform legislation because it confirmed that federal agencies, charged with the enforcement of an Act, had the administrative authority to make additional related regulations.

The markup on Antikamnia tablets, which sold at roughly ten times the cost of production, allowed Ruf to indulge his passion for Persian art, particularly rugs. When the quality of his rug collection came to the attention of the Shah of Persia, Ruf was awarded the fifth class star of the Imperial Order of the Lion and Sun in 1908. At his death in 1923, Ruf's estate was valued at $2.5 million.

The Antikamnia Company directed a large percentage of its advertising budget into direct mailings, such as this postal card to physicians and pharmacists, providing them with free samples and literature to gain their acceptance and prescriptions.
(Collection of the author)

This "Dear Doctor" postal card with another graphic image of women in pain announces that a copy of the "Antikamnia Fœtal Chart and Parturition Calendar" has been mailed gratis. Not unlike today, physicians received perks from the Antikamnia Company; in this case, a fetal chart and calendar on labor and delivery prepared by a well known medical illustrator. It is a small wonder that this card was not barred from the mail under the provisions of the Comstock Act (U.S. 17 Stat. 598) that prohibited mailing "lewd, or lascivious" materials.
(Collection of the author)

"We Shall Be Literally 'Sold to the Dutch'"

Nativist Suppression of German Radicals in Antebellum St. Louis, 1852-1861

BY MARK ALAN NEELS

Between the years 1852 and 1861, an increasing influx of foreigners to St. Louis greatly exacerbated nativist anxiety in the city. Directed prominently at radical antislavery German immigrants, nativism manifested in both violent mob action and, later, in legislative efforts to suppress foreign influence in the political process. Ultimately, the violence between both the German-born and native-born citizens of St. Louis during these years preconceived the lines of contention in Missouri during the later conflict of the Civil War. Furthermore, throughout the ordeal of the 1850s, German immigrants held to their convictions and emerged from the conflict as one of the most influential voting groups in the state.

By the mid-1840s, German immigrants from previous decades had found their niche in St. Louis society. Obtaining an ample grasp of the English language and making significant contributions to the city's workforce, many had become fully immersed in an accepted "American" lifestyle. However, when a second wave of immigrants from the Fatherland arrived in the Mississippi valley in 1850, this second generation proved strikingly dissimilar to its predecessors. According to immigrant Henry Boernstein, this second wave contained refugees from Germany in the aftermath of the failed revolutions of 1848. Mainly artisans and intellectuals, Boernstein described them as fleeing "the iron fist of victorious reaction."[1]

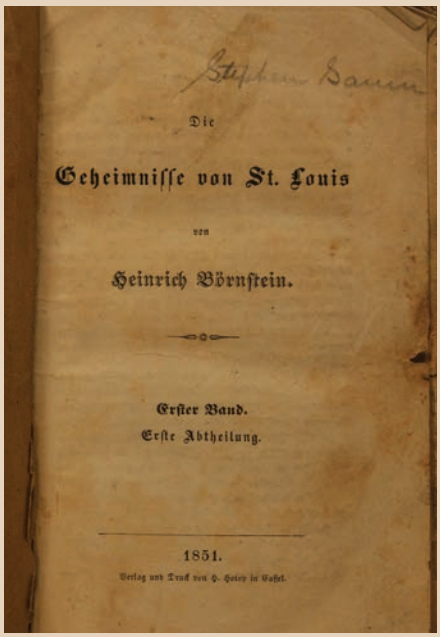
Nicknamed the "Forty-Eighters" after the year of their mass exodus to the American continent, these radical Germans began to make significant impacts on public policy in the years following their settlement in the Mississippi valley. Following their arrival, however, they also experienced trouble with the "native-born" population, which was largely xenophobic. As Boernstein recalled in his memoirs, the difference in appearance between the average "American" citizen and the rough European conjured up comparisons between the "civilized" and "uncivilized" man. "The Anglo-American took care to appear as a *gentleman*, always with a stovepipe hat, in black whenever possible, with a smooth-shaved face and clean boots," Boernstein wrote. That same Anglo-American gentleman "was rendered uncomfortable by the *peasant character* of the earlier German immigrants, with their caps, their long pipes, their sauerkraut and beer, and all the other peculiarities."[2]

Still, differences in appearance did not serve as the sole cause of apprehension between the classes. Rather, the American-born population became incensed at the foreign radicals when reading English translations of their native-language newspapers. The columns of German-language periodicals were full of democratic rhetoric, seeking to energize foreigners to preserve their European heritage by actively involving themselves in national and statewide elections. For instance, as late as October 1857, the German-language *Anzeiger des Westens* declared:

> America belongs to *us* just as much as it does to *them*, and *our* spirit, *our* way of getting something out of life, and *our* concepts of economy can find a place in this country, its resources, and its development just as well as what the *natives* seem to think is predestined. [italics in original][3]

Such rhetoric convinced many American-born citizens of the existence of a radical scheme to transplant a diluted form of the German revolution into their society. The earlier "Americanized" immigrants shared this anxiety, the fruit of which was a schism between the older generations of Germans and their new radical counterparts. More than any other single issue, this separation served, according to William Forster, as the cardinal failure in the German radicals' ability to adapt during their first years in the city. While older Germans were happy to adopt American behaviors and social patterns, the Forty-Eighters refused to assimilate so easily.[4]

After being marginally involved in the 1848 revolution in Paris where he launched a career as a journalist, political activist, and even homeopathic doctor for a short time, Henry Boernstein (1805-1892) came to St. Louis in 1850. He published Missouri's most influential German-language newspaper, *Anzeiger des Westens*, but moved to Bremen when Lincoln appointed him American consul. In his absence, *Anzeiger des Westens* ceased publication.
(Photo: State Historical Society of Missouri Photo Collection)



In 1851, Boernstein published *Die Geheimnisse von St. Louis*, originally serialized in *Anzeiger des Westens* in German, then in English the following year as *Mysteries of St. Louis: The Jesuits on the Prairie des Noyers, a Western Tale*. The novel reveals Boernstein's anti-Catholic and anti-capitalism leanings, suggesting that Jesuits were acquiring the land around present-day St. Louis University as part of a plot to find hidden treasure and circumvent American democracy.
(Photo: Olin Library Special Collections, Washington University in St. Louis)

Over time, however, generational differences yielded to unity in response to the escalating pressures placed upon Germans by the native, anti-foreign population. In 1851, understanding that mutual animosity did nothing to collectively improve their future prospects, Boernstein joined with other Germans to promote what they called the Society of Free Men. Intended to strengthen and unify the German population "in the pursuit of a mutual cause by founding freethinking schools and by fighting the Jesuits," the Society became one of the German population's most prominent associations within a year. Furthermore, the use of the words "Free Men" in the Society's name was no coincidence. Germans supported a free labor economic system, and while the Society stressed the preservation of German culture as its main objective, it also adopted an antislavery platform. The issue, unfortunately, was fraught with peril for future relations between the German immigrants and their nativist neighbors in Missouri. From that point on, freedom in all of its manifestations, rather than assimilation or enculturation, would be one of the most important issues for German-born citizens.[5]

Thomas Hart Benton (1782-1858) was among the most notable Jacksonians in the U. S. Senate for his five terms (1820-1850). In his last term, Benton worked to preserve the Union against what he considered the threat of southern extremists. His fight in the Senate against John Calhoun of South Carolina to allow slaves to be transported into western territories won him enemies among proslavery Missourians, including Claiborne Fox Jackson. (Photo: State Historical Society of Missouri Photo Collection)

While German immigrants were loud in their antislavery policies, it does not appear that slavery was a particularly explosive issue for most St. Louisans. Within the city limits, Floyd Shoemaker has noted, in 1850 there existed 1,700 free blacks and 1,500 slaves. Combined, blacks represented a miniscule portion (just over four percent) of the city's overall population of 78,000 people. This figure helps to explain the difficulty the Society faced in taking sides, within St. Louis, on an issue that was of greater importance to out-state Missourians. Richard C. Wade explained this phenomenon further by stating his belief that most Missouri slave owners chose to reside in rural areas, rather than urban areas, because cities provided a greater challenge in isolating blacks from the free labor proponents among their neighbors. In St. Louis, therefore, the Germans came under attack from nativists not because of their antislavery agenda, but rather for their attempt to "Germanize" politics by involving themselves in a uniquely "American" problem. Outside of the city, however, the German attachment to free labor did draw animosity from proslavery activists. The alliance of nativists and proslavery ideologues would become more dangerous over time.[6]

Within a few years of their arrival in Missouri, the German radicals had completely electrified the political atmosphere in the state. In the years to come, as antislavery advocates and German immigrants joined forces against proslavery nativists, Missouri politics reflected the buffeting currents of discord that were fanning the flames of disunity across the entire nation. Nativist and proslavery opposition to the German electorate's growing influence became so inflamed that Boernstein, in his position as editor of the *Anzeiger des Westens*, feared that the threats being leveled at him by nativists might culminate in violence similar to that which befell Francis McIntosh, a free black man burnt alive by a mob for the murder of two St. Louis dock workers. The execution by mob rule of editor Elijah Parish Lovejoy was also fresh in the minds of all antislavery St. Louisans.[7]

Perhaps Boernstein's fears were justified. Starting in 1852, the rift between immigrants and nativists noticeably widened as violent uprisings, provoked by both parties, escalated in intensity. In that year, one Irish-born immigrant, disgusted by increasing anti-foreign sentiment, lamented to the editor of the *Missouri Republican*, "I wish every distinction founded on the accident of birth to be forgotten and abolished. All that I want is that when a man's political claims are in question, it should not matter where he was born."[8] As elections approached in the city of St. Louis, many more commentaries such as this began appearing in the foreign newspapers. Meanwhile, out of retaliation for the success of German-backed candidates, nativists increased their efforts to curb foreign enfranchisement.

The candidate dearest to the hearts of German St. Louisans was Senator Thomas Hart Benton. Just before the arrival of the radical Forty-Eighters, the Missouri senator had reversed his long-standing proslavery views, provoking a campaign of vilification against him by citizens outside the city. Because he eventually became an antislavery advocate, proslavery Democrats condemned him and his followers to political oblivion. With a growing schism in the Democratic Party, the minority Missouri Whig Party won a landslide victory in 1848, which one Democrat attributed to "the *traitorous designs* of T.H. Benton." Rather than caucus with the victors, however, by June 1852 the Benton Democrats sought to introduce themselves as separate from the other two political organizations. Any chance of success, they believed, lay in continued opposition to the proslavery Democrats. Whigs shared common antislavery opinions with the Benton Democrats; however, the two parties opposed one another over the issue of foreign enfranchisement. Bentonites advocated for the rights of foreign-born citizens, while Whigs supported a nativist agenda. Attracted to the Benton party for obvious reasons, German voters had a profound influence on the continued success of the minority party of Benton and his partisans.[9]

Proslavery Missourians, like their Whig opponents, were largely nativist to begin with, and the combination of Benton's antislavery agenda and his embrace of foreigners made the senator and his constituents all the more disgusting to nativists of all political affiliations. After losing several elections in the space of four years, the same Democrats who had fervently opposed Benton fixed blame for their party's dire straits on meddling foreigners. In order to destroy Benton's future political prospects, proslavery men realized that they must rebuild their own party as an opposition to all things foreign. On that note, G.W. Good, a friend of the prominent Kennett family of Missouri, suggested to Colonel Ferdinand Kennett (brother of St. Louis Mayor Luther Kennett), "*We shall be literally 'sold to the Dutch' & the sooner we put our house in order, the better…* It seems to me that every man of character & influence in Missouri should esteem it his especial business to do all in his power to kill off Benton."[10]

Good elaborated further on his opinion of the Benton-foreign alliance by laying out a two-pronged strategy for reclaiming success for the anti-Benton party. First, they needed to strengthen the support of proslavery voters by opposing the antislavery wing of the Benton party. Second, they needed to win over disaffected Whigs through an anti-foreign platform. The result, Good hoped, would be an unstoppable opposition to antislavery foreigners by the majority of citizens and, consequently, the destruction of any party that linked its fate to that of the German radicals.

The first prong of this strategy, to win over anti-foreign Whigs, had largely succeeded by late March 1852 when Whigs began attributing the continued success of the Bentonites to the influence of German voters. A column titled "The Locofoco Row" appeared in the March 28 edition of the *Missouri Republican,* recounting the violence of a German mob toward an assembly of anti-Benton Democrats and Whigs at the St. Louis courthouse. *The Republican* reported that the *Anzeiger des Westens* had accused this nativist assembly of attempting to tear apart a fragile reunion between Benton Democrats and their disaffected proslavery partisans. The *Anzeiger,* the *Republican* claimed, had accused the Whigs of persuading the nativist Democrats to renege on an earlier compromise with the Bentonites to nominate candidates for municipal offices that would be acceptable to the German citizenry. The *Anzieger's* editorial suggested, therefore, that this recent meeting at the courthouse was a conspiracy by nativist Whigs to aggravate the anti-foreign sentiment of the anti-Benton Democrats, and thereby nominate a new set of candidates–this time without the endorsement of the Germans.[11]

An Act to Provide for the Organization, Support and Government of Common Schools, in the State of Missouri

Sec. 10: The English language, and its rudiments, shall be taught in all schools organized and kept up under this act.

Approved December 12, 1855
Revised Statutes of the State of Missouri, 1856

In 1855, Missouri state government passed a comprehensive act to standardize the organization, methods of funding, and duties of teachers in public schools around the state. Among those "reforms" for schools was this provision, Section 10 of Article VII, "Miscellaneous Provisions."

The allegations are confusing, to say the least, but the supposed attempt by the Whigs to break up unity within the Democratic Party was consistent with their party's earlier strategies for success. As John Mering suggested, the status of the Whigs as a minority meant that the only chance for success in elections lay either in endorsing "Whiggish" Democrats, or in electing Whigs by creating schism within the Democratic ranks. The latter was their preferred method. Thus, the editors of the *Anzeiger* argued that unless they were successfully blocked in their attempt at disunion, the nativist Whig candidates would once more achieve victory. Therefore, the *Anzieger* concluded, it was the duty of all good Democratic Germans to thwart the efforts of the Whigs by any means necessary.[12]

Prompted by the *Anzieger*'s call to arms, on the evening of March 27, 1852, as the Whig and Democratic assembly met in the rotunda of the Courthouse, a German mob interrupted the proceedings by shouting over the voice of the convention chairman. Failing to effectively disrupt the meeting, the Germans rushed the podium and tore into pieces a scrim with the words "THE UNION OF DEMOCRACY" above the image of two hands clasped in friendship. The efforts of the mob were ultimately futile, and its only success was greater animosity from the natural-born citizens, along with a concentrated effort over the next few weeks on the

Besides being the site of the famous *Dred Scott v. Sanford* case, the St. Louis Courthouse was also the scene of a nativist mob in 1852. (Photo:Christopher Duggan, Lindenwood University)

part of nativists against Germans. Retaliation came the following Monday at a German rally near Laclede Market, when a pro-German demonstration was interrupted by an assembly of Whigs and anti-Benton Democrats who assaulted the foreigners with stones and debris. Several prominent Germans threatened to open fire on the assailants with their pistols. This episode did not come to an end until the municipal police intervened on the side of the nativists against the Germans.[13]

Nativists saved their most violent demonstration for Election Day. An anti-foreign mob led by notorious nativist Edward Zane Carroll Judson, alias Ned Buntline, assaulted the polling place of the primarily German First Ward–considered to be the epicenter of foreign political activity. Judson's cohorts smashed the ballot box to pieces and scattered the Germans' ballots through the streets, then followed up the assault by attacking and plundering the nearby German-owned taverns. Furthermore, when a few Germans resolved to protect their community and attempted to resist Judson and his followers, the assailants opened fire with revolvers while a municipal fire brigade joined the nativist ranks and turned their hoses on bystanders who attempted to assist the wounded Germans. By the time nightfall brought an end to the hostilities, a German tavern owned by a prominent member of the community had been burned to the ground, and the mob had quelled further German resistance by threatening to turn a cannon, confiscated from the German militia, on its own citizens. As had occurred in the Laclede Market riot, the nativist-controlled police force once again did nothing to suppress the violence. Possibly due to bad press generated from their earlier involvement in the Laclede riot, the police stood idly by in this case and offered no assistance to either party. The position of the police in these violent demonstrations was an important example of the lengths to which nativists would go in order to suppress foreign influence in civic affairs.

"As a nation, we began by declaring that 'All men are created equal.' We now practically read it, 'All men are created equal except Negroes.' When the Know-Nothings get control it will read, 'All men are created equal, except Negroes and foreigners and Catholics.' When it comes to this, I should prefer emigrating to some country where they make no pretense of loving liberty."

— Abraham Lincoln

The violence of nativist mobs ultimately culminated in the reelection of their candidate, Luther M. Kennett, as mayor of St. Louis. However, their reactionary measures completely overshadowed the fact that by disturbing the earlier rally at the courthouse, the Germans had incited the mob war in the first place. Instead, any further reticence on the part of naturalized Germans to unify with the Society of Free Men vanished in the face of what was perceived by Germans to be a nativist onslaught. German unification became so strong, in fact, that German voters played an integral part in securing Benton's election to the House of Representatives that August. Of the Germans' increasing resilience, Boernstein later recalled, "The Germans were determined not to allow their right to vote to be altered by one iota. Their experience had been so considerably enriched by the events of the municipal election in April that they drew even closer together, and they were resigned and prepared even for the worst."[14]

Following Benton's election in the fall of 1852, and realizing how mob reaction to German enfranchisement could backfire on them, proslavery Democrats and nativist Whigs began to revise their methods of foreign persecution. As earlier attempts to unify Whigs and Democrats under an anti-foreign banner had proven, animosity against foreigners knew no political affiliation. Thus, as the Whig Party declined in the middle part of the decade, the nativist Know-Nothing Party effectively took up the torch. Uniting under a common anti-foreign banner as the election of 1854 approached, they employed more professional means to suppress foreign involvement.

Drawing from the experience of the past six years, latter-day nativists understood the overwhelming influence of the foreign element on the outcome of statewide elections. Therefore, under the leadership of the Know-Nothings, an anti-foreign movement in the state legislature directed at the curtailment of foreign enfranchisement gained momentum in the middle years of the decade. In fact, the effective minimizing of foreign influence became key to the Know-Nothings' 1856 national platform. Article 4 of their platform stated, "Americans *must rule* America, and for this purpose, before all others *only native-born citizens should be elected to all federal, state and municipal offices*." The reaction from the pro-foreign populous to the national platform was, understandably, explosive.[15]

Know-Nothing literature rationalized the party platform by questioning whether immigrants were sufficiently tutored in the "American system" to effectively exercise their right to vote, and whether foreign loyalty among the immigrants lay with the welfare of the nation or with outside forces – such as the Pope. Most prominent, though, was concern at the overindulgent lifestyle of immigrants, who drank heavily and celebrated on Sundays. These concerns led Know-Nothing state legislators to propose a temperance movement in an effort to curtail the conduct of business and consumption of alcohol on the Christian Sabbath. Since many Germans owned local taverns, they naturally bore the brunt of these measures.[16]

While temperance was successful at decreasing the number of drunks roaming the city streets on Sundays, the measures were of a greater and more immediate political significance in restricting tavern operating hours, which robbed foreigners of their primary venue for political fundraising. Taverns provided forums not merely for the conviviality of drink, but also for arguments over political issues. Furthermore, the profits from the sale of alcohol often went to fund pro-German campaigns. Restricting operating hours almost entirely suppressed the Germans' best means of

opposing nativism.[17]

Rather than completely barring immigration, Alexander Keyssar defended the Know-Nothings by explaining that measures such as the temperance movement were meant only to *temporarily* restrict immigrant rights, and limit their political activity only until the immigrants could be properly acculturated to the American way of life. Out of a similar compulsion, in November 1857, anti-foreign members of the Missouri legislature rejected a request by German citizens to incorporate a town in central Missouri. Originally, the Germans hoped that nativists would welcome such a village. While it *did* create an epicenter from which to potentially promulgate the German culture in the state, proponents of the measure also argued that it removed foreign pressure from communities otherwise dominated by nativist populations. The *Anzeiger des Westens* asserted that slavery was the key issue leading to the measure's defeat. The legislature, the paper stated, denied the charter out of continual fear, whipped up by the proslavery advocates in the legislature, of abolitionist-leaning Germans. Indeed, Jefferson City sat in a primarily proslavery district and the legislature consisted of a majority of proslavery representatives. Were a German village to be located in this proslavery stronghold, it was certainly possible that, over time, the influence of free-labor Germans on local elections might tip the balance in the state legislature in the favor of antislavery proponents. The proslavery population therefore portrayed the failed measure as an attempt by the Germans to cultivate fertile soil for promoting their perceived threat of an association between "Germanism" and abolition. By voting down the measure, proslavery legislators had inaugurated a quest to eradicate both the uniquely German lifestyle and, simultaneously, to halt their opposition to slavery.[18]

Claiborne Fox Jackson (1806-1862) led the anti-Benton Democrats in the Missouri legislature. In 1850, when senators were still chosen by the state legislature rather than popular election, he was able to deny Benton a sixth term representing Missouri in the U. S. Senate. Later, he was elected governor of Missouri in 1860; he supported the Confederacy, and attended the Missouri General Assembly in Neosho in October 1861 that passed an ordinance of secession. He fled to Arkansas in early 1862, where he died of stomach cancer late that year. (Photo: State Historical Society of Missouri Photo Collection)

The campaign to implement the nativist agenda, however, resulted in a spectacular backfire that consumed the Know-Nothings rather than their intended target. As quickly as the party appeared on the national scene, it disappeared. As was the case in previous years, the stronger the intimidation of the Know-Nothings, the stronger the German resistance. However, coming off of their victory against the German village and again currying favor with former anti-foreign Whigs and Know-Nothings, the anti-Benton Democrats successfully pressed the correlation between "Germanism" and antislavery politics until they were inextricably linked in the minds of anti-foreign politicians and citizens alike. Against this newly empowered force, the Benton Democrats stood little chance of further political gain. Cast adrift and searching for a base from which to counter the onslaught of proslavery Democrats, the Benton Democrats eventually found refuge in the ranks of the fledgling Republican Party. Likewise, the Germans found in this new organization, their greatest ally in the fight against nativist suppression.[19]

On August 24, 1855, in response to the Know-Nothing national platform, Abraham Lincoln wrote to his friend, Joshua F. Speed, "How could anyone who abhors the oppression of Negroes be in favor of degrading classes of white people? Our progress in degeneracy appears to me to be pretty rapid. . . . As a nation," Lincoln continued, "We began by declaring that '*All men are created equal.*' We now practically read it, 'All men are created equal except Negroes.' When the Know-Nothings get control it will read, 'All men are created equal, except Negroes and foreigners and Catholics.' When it comes to this, I should prefer emigrating to some country where they make no pretense of loving liberty."[20]

The fact that the Republican Party nominated so moderate a candidate as Lincoln in 1860 helped to uplift the disaffected partisans from the ashes of previous political parties. The new party had managed to successfully form a coalition of Whigs, Benton Democrats, Know-Nothings, and Free-Soilers under one banner. While antislavery Whigs and Know-Nothings had remained vehemently anti-foreign, they were far more opposed to what they saw as an emerging conspiracy by proslavery Democrats to monopolize power in Congress through the extension of slavery into the Western territories. German Missourians were equally opposed to this proslavery conspiracy, and were willing to overlook the inclusion of some nativists in the party ranks as long as the moderate Lincoln continued to support the sort of inclusive policies he had mentioned in his letter to Speed.

The emergence of the Republican Party, however, did not immediately absolve Missouri immigrants of the burden of nativist suppression. While Lincoln won the presidency in 1860, the anti-Benton Democrats secured the election of Claiborne Fox Jackson as governor. Jackson's administration, condemned by the *Anzeiger* as one of "arrogance, arbitrariness, ignorance, and coarseness incarnate," intensified the suppression of foreign enfranchisement in the months leading to the outbreak of war in Missouri. Indeed, it was under Jackson's leadership that the suppressive efforts of proslavery nativists reached a fevered peak.[21]

Newly inaugurated, the Jackson administration immediately enforced legislation that required immigrants to learn English in order to attend public schools. This act, the governor explained,

Despite nativist questions about them, German immigrants served in the Union Army during the Civil War. In St. Louis, they were commemorated by this statue in Forest Park of Franz Sigel, a commander in Baden during the Revolution of 1848 who arrived in the United States in 1852.
(Photo: Christopher Duggan, Lindenwood University)

was a punishment for the hostility exhibited by Germans during the previous decade toward the institutions of the state. Because of their incendiary acts against proslavery Democrats, he argued, Germans deserved no special favors or protections from the government. As an additional sting, the *Anzeiger* reported that the state legislature refused to print a German language edition of either the recent Language Act or the governor's inaugural speech. By refusing to print in the German tongue, Jackson and the Democrats essentially scoffed at the influence of German voters, refusing to acknowledge any cultural identity separating them from other citizens. By promoting these same measures, the new governor effectively sent the message that his administration sought to eradicate any sense of "Germanism" in Missouri, once and for all.

Another measure approved by the Missouri Senate barred further organized resistance to state officials in St. Louis. A prior act, in effect from March 1855, gave municipal leaders the power to quell mob action. This new act, however, revoked that authority and placed that power solely in the hands of the governor. Both the *Anzieger* and the *Missouri Democrat* denounced the new act, arguing that, by approving such measures, the state legislature had evolved the office of the governor into a military dictatorship. "It is a law," the *Anzieger* declared, "that grants to people with a blue cockade an unlimited license to commit violent crimes of every sort without punishment."[22]

Germans in St. Louis greatly feared that the new act would also allow the governor to declare them enemies of the state. Apart from quelling mobs, the language of the act was so ambiguous as to possibly allow Governor Jackson to sponsor mobs through inaction. With the enforcement of this act, a few nativists, miles away in the state capital, had ultimately nullified all of the gains made over the past decade for German Missourians.

In early April 1861, in accordance with the new legislation, the Jackson administration appointed new police commissioners in St. Louis. Their sole purpose was the removal of any organized opposition to the administration within the city limits. The *Missouri Republican* reported that, by the powers granted to them by the governor, the commissioners planned to again enforce the Sunday temperance laws. Furthermore, they planned to punish antislavery advocates by granting no permits or authorizations for travel to freed blacks or mulattos, and by imprisoning any person carrying abolitionist literature.[23]

The following day, Sunday, April 14, 1861, news arrived of the surrender of Fort Sumter to rebel forces in Charleston, South Carolina. Simultaneously, in St. Louis the police commissioners began enforcing the temperance laws by sending law enforcement officers to close all German venues and expel their patrons into the streets. Resistance was met, particularly at the St. Louis Opera House, then under the management of Henry Boernstein. While

This statue of Thomas Hart Benton by Harriet Hosmer stands facing westward in Lafayette Square Park.
(Photo: Christopher Duggan, Lindenwood University)

Boernstein argued with the commissioners that the closing of German venues was an illegal suppression of German people's rights as business owners, the agitation of the assembly of theater patrons began to intensify. Only by a careful address to his fellow citizens did Boernstein manage to avert a riot.

Boernstein urged the citizens to oppose the hateful acts of the administration not with violence, as they had done in the past, but by voting against pro-Jackson candidates in the next election. However, the Jackson administration did not remain in power long enough to be swept away by constitutional means. When Jackson proclaimed Missouri's loyalty to the Confederacy, the administration's oppressive measures spawned armed resistance to secession by the entire German and free population of St. Louis. On April 19, 1861, the *Anzieger* ran an editorial with the title, "Not One Word More – Now Arms Will Decide!" To that effect, following the governor's letter to the president denouncing the federal government's call for troops, Boernstein and several prominent German citizens, including later acclaimed Civil War commander Franz Sigel, met at the offices of the *Anzeiger* and agreed to muster a German militia to assist the federal troops.[24]

The inclusion of nativists and German immigrants in the same political party proved that by 1860 some conservative nativists were willing to put aside their personal prejudices in order to pursue the far weightier common goal of preserving the Union. For example, General Nathaniel Lyon, the commander in charge of the Union forces in Missouri, was himself a nativist, while one of his closest lieutenants, Sigel, was a radical German. Still, the majority of Missouri nativists, those who had wreaked havoc on the German immigrants during the previous decade, opposed the Republicans and supported the rebellion. Prepared to resist once more their recent oppressors, Boernstein and other Germans raised troops for the defense of the Union and were intent upon keeping St. Louis loyal to the United States. To that end, the foreign element was heavily involved in both the capture of the rebel forces at Camp Jackson in May 1861 and the battle of Wilson's Creek later that August.[25]

The influence of German Missourians was ultimately felt in all aspects of the war, political and military. While they fought valiantly in conflicts across the nation, they were most influential in local politics. Also, while some semblance of nativism continued in Missouri after the war, the postwar influence of the German citizenry assured that nativism never again reached the levels of violence experienced during the Antebellum period. Likewise, by allying with the victorious antislavery party of the war, the German-speaking electorate had secured its influence in statewide affairs. For a time, in postwar politics, the foreign element proved so influential that the political party that carried its favor tended to carry the election as well.

Who were these German "radicals," anyway?

In 1848, Germany did not exist as we know it today. After the French Revolutionary and Napoleonic wars (1792-1815) the Congress of Vienna had created the German Confederation, which was made up of 35 states and four free cities. These small states were ruled by conservative kings, princes, and dukes who feared that reform would lead to revolution such as they had recently witnessed in France. At the same time, some of their subjects (primarily university students and the middle classes) had adopted such "revolutionary" ideas as representative government, a constitution that included rights such as freedom of assembly and of the press, and a unified German state.

Revolutions broke out across much of Europe in 1848, including in many of the states of the German Confederation. They often began with peasants, hungry from the frequent bad harvests of the late 1840s, and the urban poor, who were also feeling pressured by the scarcity (or complete lack) of food and the loss of their jobs. Middle class liberals took advantage of the disorder to make political demands. After several months, rulers were able to retake control of their states; as they restored order, they were in no mood to make concessions to their ungrateful subjects. Constitutions given under pressure earlier were suspended or changed into conservative documents. Those who had recently rebelled often left Europe entirely, usually going to the United States where they hoped to avoid arrest or to find a place more in keeping with their ideas and ideals. Many of these Germans settled in St. Louis.

— JoEllen Kerksiek

NOTES

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2 Ibid., 131.
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4 Walter Forester, *Zion on the Mississippi* (St. Louis: Concordia Publishing House, 1953), 252-53; *Mississippi Blatter,* March 27, 1859.
5 Boernstein, *Memoirs,* 136; James Neal Primm, *Lion of the Valley: St. Louis, Missouri* (Boulder, Colorado: Pruett Publishing Company, 1990), 176.
6 Floyd Calvin Shoemaker, *Missouri and Missourians: Land of Contrasts and People of Achievements* (Chicago: The Lewis Publishing Company, 1943), 575; Richard C. Wade, *The Urban Frontier: The Rise of Western Cities, 1790-1830* (Cambridge: Harvard University Press, 1959), 125-126.
7 Boernstein, *Memoirs,* 189.
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10 G.W. Good to Col. F. Kennett, December 8, 1852, Kennett Family Papers, MHS.
11 *Missouri Republican,* March 28, 1852.
12 Mering, *The Whig Party in Missouri,* 19-25.
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14 Boernstein, *Memoirs*, 198-199; William Norton, Diary, February 16, 1856, MHS.
15 Boernstein, *Memoirs*, 205; Alexander Keyssar, *The Right to Vote: The Contested History of Democracy in the United States* (New York: Basic Books, 2000), 83.
16 Tyler Anbinder, *Nativism and Slavery: The Northern Know Nothings and the Politics of the 1850s* (New York: Oxford University Press, 1992), 145.
17 Keyssar, *The Right to Vote,* 84-85; *Anzeiger des Westens,* November 15, 1857.
18 Boernstein, *Memoirs,* 209-210.
19 *Mississippi Blatter,* December 24, 1859.
20 Ward Hill Lamon, *Recollections of Abraham Lincoln: 1847-1865* (Lincoln: University of Nebraska Press, 1994), 299.
21 *Anzieger des Westens,* January 14, 1861.
22 Boernstein, *Memoirs*, 268-270; *Anzeiger des Westens,* April 16, 1861.
23 *Missouri Republican,* April 13, 1861.
24 *Anzeiger des Westens*, April 19, 1861.
25 *Anzeiger des Westens*, April 19, 1861; Boernstein, *Memoirs,* 272-96. For an excellent study encompassing the German role in shaping events in Civil War Missouri, see William Garrett Piston and Richard W. Hatcher III, *Wilson's Creek: The Second Battle of the Civil War and the Men Who Fought It* (Chapel Hill: University of North Carolina Press, 2001).

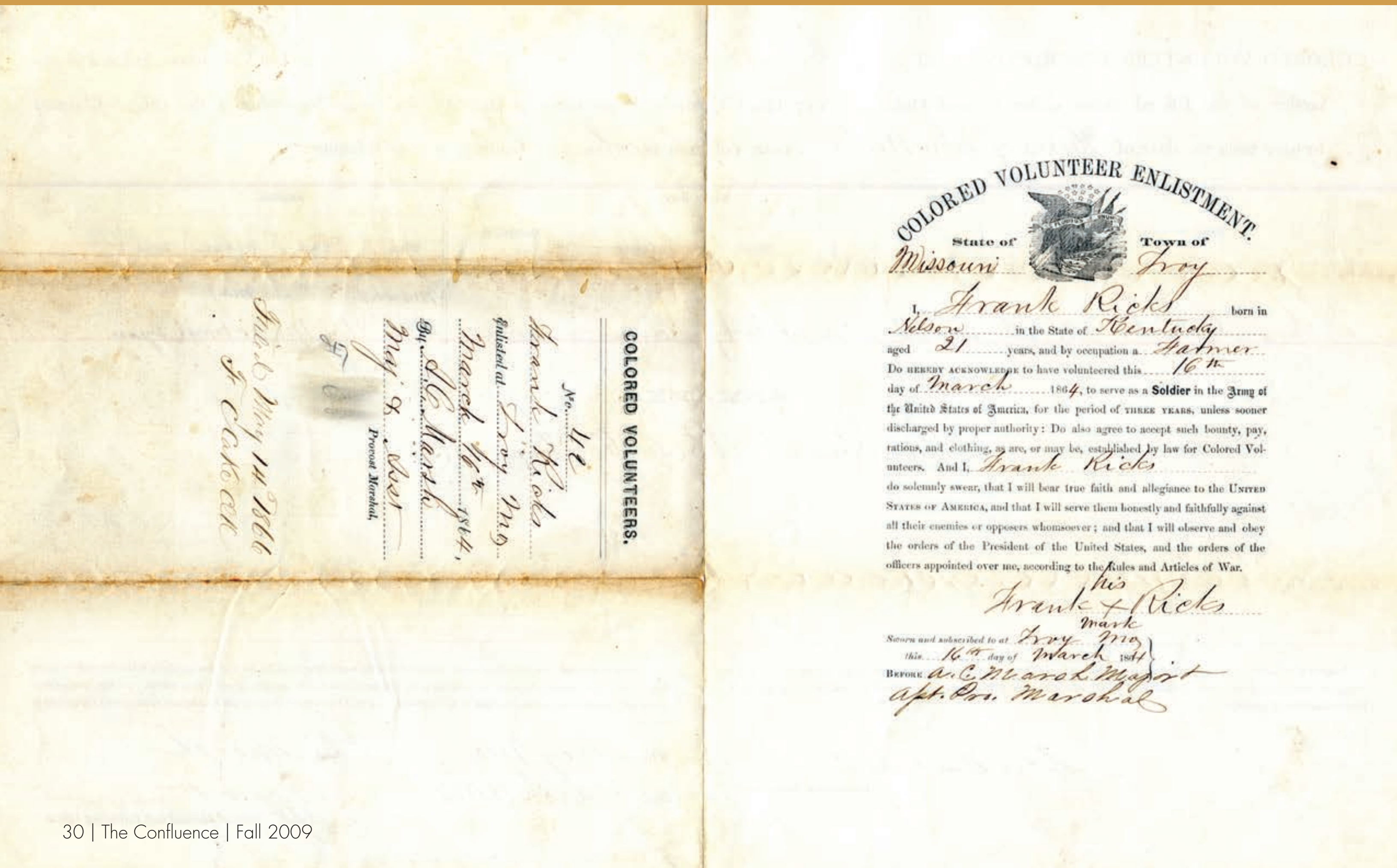
Slave and Soldier

A Glimpse at the Life of Frank Ricks

BY WILLIAM GLANKLER

The lack of sources documenting black lives—slave and free—is a persistent source of frustration for African American genealogists and historians, especially for the period prior to the Civil War and the abolition of slavery. The simple fact is that slaves themselves did not leave written records of their experiences and, although there were some free blacks in Missouri prior to the Civil War, most notably in St. Louis, the overwhelming majority of African Americans in Antebellum Missouri were slaves. After the Civil War, when African Americans began to take advantage of their citizenship, documentary evidence of vital statistics and other manuscript evidence accumulated. Most Antebellum documentary evidence relates only to the small communities of free blacks, ignoring slaves. Moreover, most of the sources that do exist on slavery are from white authors and, therefore, tell us very little about the slave experience.[1] On the other hand, public records, especially probate and other court records, although recorded by white officials, do provide a relatively unbiased entry point for studying the slave experience in Missouri. Frank Ricks' experience is but one example.[2]

Probate estate files contain information about the administration of personal and real property belonging to recently deceased persons as well as the financial administration of the deceased's estate. The inventory and appraisal of property, settlement reports, documents regarding partition of property, accounts and receipts for slave hire contracts, and other court documents contain a great deal of information about slave property. They often record the ages of slaves and document transfer of ownership, but they seldom provide the level of information that three probate files in Lincoln County provided for Frank Ricks. The discovery began with the unearthing of the enlistment paper pictured here, a remarkable find since there


COLORED VOLUNTEERS.

No. 46

Frank Ricks

Enlisted at Troy Mo

March 16th 1864,

By A. C. Marsh

Maj. & Asst

Provost Marshal.

Filed May 14 1866

F. Clark Clk

COLORED VOLUNTEER ENLISTMENT.

State of Missouri Town of Troy

I, Frank Ricks born in Nelson in the State of Kentucky aged 21 years, and by occupation a Farmer Do hereby acknowledge to have volunteered this 16th day of March 1864, to serve as a **Soldier** in the Army of the United States of America, for the period of three years, unless sooner discharged by proper authority: Do also agree to accept such bounty, pay, rations, and clothing, as are, or may be, established by law for Colored Volunteers. And I, Frank Ricks do solemnly swear, that I will bear true faith and allegiance to the United States of America, and that I will serve them honestly and faithfully against all their enemies or opposers whomsoever; and that I will observe and obey the orders of the President of the United States, and the orders of the officers appointed over me, according to the Rules and Articles of War.

Frank his + mark Ricks

Sworn and subscribed to at Troy Mo *this* 16th *day of* March 1864

Before A. C. Marsh Major Apt. Pro. Marshal

is no obvious reason why this document would have been filed with the estate of his former owner. This document prompted a search through the probate files of Ricks' former owners that resulted in a compelling outline of Ricks' life, from his birth in Nelson County, Kentucky, to his death as a private in the U.S. Colored Troops.[3]

Frank Ricks was born December 30, 1841, in Nelson County, Kentucky, and was the slave of John Ricks. Sometime in the late 1840s, John Ricks moved his family to Lincoln County, Missouri, bringing with him at least five slaves: Albert or Alberto, Eliza, Harrison, Franklin or Francis, and Celia or Sealy.[4] John Ricks died in 1853 leaving these slaves to his sons, John M. and Thomas Ricks, who were also tasked as guardians for his daughter Jane, of unsound mind. John M. Ricks died very soon after his father, leaving Thomas the sole guardian of his enfeebled sister, thus controlling her slaves (and the income they generated). Almost immediately after John M. Ricks died, executors of his estate disputed Jane's actual ownership of three of the slaves, which prompted the collection of several documents. One of them is a deed dated a deed from Kentucky dated 1828, by which the elder John Ricks vested in Jane a life estate in Frank and the other slaves, to be managed by her guardian (now Thomas), thus ensuring that the slaves would remain with Thomas Ricks for Jane's benefit.

In order to fulfill his guardianship duties, Thomas hired out the slaves with the exception of Eliza, who cared for Jane. It was common practice for administrators to hire out the estate's slaves in order to raise income for the estate. The period of hire was most often one year, beginning January 1 and ending December 24. Contracts for slave hire found in court case files verify this and often specify that the slaves were to be excused from work between Christmas and New Year's, which was common practice throughout Missouri. Moreover, the death of the master quite often forced the administrator to sell some or all of the estate's slaves.[5] Administrators recorded this information in their annual settlement reports. If the estate hired out numerous slaves, the administrator often created separate documents that recorded information for the hire of each individual slave, which included the slave's name, the amount received, and to whom the slave was hired.

Documents such as these filed by Jane's guardians—first Thomas Ricks and then William Young—detail to whom Frank was hired out and at what rate for the years 1855-1863. During those years, Frank worked for C.W. Ricks, Thomas O. Ricks, N. Fielder, John O. Ricks, Thomas Rhodus, J.M. Guthrie, James Shannon, and Isaac Whiteside, earning $1,153 for Jane's upkeep, an average of $128 per year. After Jane Ricks died in January 1864, William Young administered her estate, and he continued hiring out the slaves for the year 1864. Frank was hired out that year to William C. Price, but only earned $31.25. In comparison, Harrison fetched $137.50, which suggests Frank was only hired out for two to three months, a time period that coincides with Frank's enlistment with the Colored Volunteers on March 16, 1864.[6]

The enlistment form provides some details about Frank Ricks. He was recruit number 42 in Troy, Missouri, and enlisted for three years. The form verifies that he was born in Nelson County, Kentucky, and was the former slave of the heirs of John Ricks. The enlisting officer, Major A. C. Marsh, Assistant Provost Marshal, noted that Ricks was 21 years old, with black eyes and black complexion, and was 5 feet 9 inches tall. Marsh also noted that Ricks was a farmer by occupation and that he "presented himself." Ricks signed the enlistment form with his mark. According to military records, Ricks was a private in the 68th Regiment of the U.S. Colored Troops Company F under Captain Goodshul and was mustered out March 22, 1864, at Benton Barracks in St. Louis. He died October 12, 1864, while his regiment performed garrison duties in Memphis, Tennessee.[7]

Frank Ricks' enrollment papers. (Photo: Missouri State Archives)

COLORED VOLUNTEER DESCRIPTIVE LIST of Frank Ricks Colored Volunteers, enlisted in the service of the United States under General Order No. 135, Head Quarters Department of the Mo. St. Louis, November 14th, 1863. Claimed to have been the slave of Heirs of John Ricks a citizen of Lincoln County, State of Missouri.

Name.	Description.						Where Born.		Occupation.	Enlisted.			
	YEARS OF AGE.	EYES.	HAIR.	COMPLEXION.	FEET.	INCHES.	State.	County.		When.	Where.	By whom.	Period.
Frank Ricks	21	Blk	Blk	Blk	5	9½	Kentucky	Nelson	Farmer	March 16 1864	Troy Mo	Maj A C Marsh	3 years

REMARKS.

This Recruit Presented himself

I CERTIFY, on honor, that I have carefully examined the above named Colored Volunteer, agreeably to the General Regulations of the Army, and that, in my opinion, he is free from all bodily defects and mental infirmity that would, in any way, disqualify him from performing the duties of a soldier.

Sam'l A Ward M. D.
Examining Surgeon.

I CERTIFY, on honor, that the above named Colored Volunteer was duly enlisted by me, and that the above is his correct Descriptive List. That I have minutely inspected him previous to his enlistment, and that he was entirely sober when enlisted; and that, in accepting him as duly qualified to perform the duties of an able-bodied soldier, I have strictly observed the Regulations which govern the recruiting service.

Station Troy Mo
Date March 16 1864

A. C. Marsh
Major
Provost Marshal and Recruiting Officer.

Benton Barracks, opened just after the Civil War, started on land rented from John O'Fallon around present-day Fairgrounds Park in St. Louis. When Jefferson Barracks (in south St. Louis) became a hospital during the war, Benton Barracks became a troop cantonment and camp for refugee slaves. (Photo: State Historical Society of Missouri Photo Collections)

The mystery remains as to why Ricks' enlistment form was filed in his former owner's estate file. The federal government passed legislation in February 1864 regarding the recruitment of slaves into the military, as well as compensation for their owners. The legislation required all able-bodied black men between the ages of twenty and 45 to enroll in the U.S. Army. Upon enrollment, the master was to receive a certificate indicating the slave's freedom, as well as $100 compensation, if the master was loyal to the Union.[8] This suggests that the document was proof of enlistment held by Ricks' former owner as a means of receiving his monetary compensation. Because Jane Ricks' estate file was still active, any income for the estate, including compensation for slaves belonging to the estate, would have been filed with the estate papers and recorded in the settlement reports filed by the administrator. Yet, there is no documentation in the files that Young ever requested or received any compensation from the government. The fact that the enlistment form was not filed by the Lincoln County Probate Court until May 14, 1866, suggests the possibility that the administrator hoped to file his claim at a later date. It is also possible that Young failed to prove his loyalty to the Union, thus making him ineligible for the federal compensation.[9]

Furthermore, nothing is known regarding the circumstances under which Frank enrolled in the army. Although the federal legislation functioned essentially as a draft, it is unknown if Frank willingly enlisted, was forced to enlist by Union officers "recruiting slaves," or was voluntarily delivered to the army by his owner or master. A small receipt in Jane Ricks' estate file shows that William Young purchased a new pair of shoes for Frank four days after he enlisted, which indicates he may have supported or even encouraged the former slave's desire to serve in the military. What role, if any, did William Price, the man to whom Frank was hired out at the time of his enlistment, play in all of this? Persons hiring slaves were the legal masters of their hired slaves and were accountable for the protection as well as the actions of the slaves they hired. The settlement report proves that Price paid for the short period of time he hired Frank, so it is unlikely, though not impossible, that Frank enlisted against Price's will. Moreover, Young's purchase of the pair of shoes indicates that Frank did not run away from Price in order to enlist, as did occur with many slaves during the latter years of the war.[10] If Frank had run away, it is doubtful he would have had any contact with his owner after enlistment. These questions will likely remain unanswered because of the lack of written evidence of slaves' lives. Yet, the discovery of the above information demonstrates that such evidence does exist.

Frank Ricks' enlistment form and related documents do far more than provide some details about the life of one slave. Despite the questions left unanswered, these records provide a glimpse of the unsettled nature of slave property in Missouri at the end of the Civil War. Primarily, because most slaveholders in Missouri owned few slaves, slavery in Missouri, while not benign, was at least less brutal than in the Deep South. Owners at times allowed their slaves modest freedoms, such as allowing the use of a horse to visit family at another farm or not requiring them to work on Sundays. These small concessions only heightened the possibility that slaves would run away or that they might come in contact with abolitionists inciting insurrection or confiscation of slave property. In turn, this heightened the anxiety slaveholders felt for the security of their most valuable property. The Civil War in Missouri only exacerbated those fears. Slaves leaving their masters to become Union soldiers or taking advantage of the unsettled political and social situation to run away only added to the peril in which the very nature of Missouri slavery placed slave property.[11] Given this situation, perhaps William Young and William Price simply surrendered to the inevitability of the circumstances.

Court records processed by the Missouri Secretary of State Local Records Program document various other aspects of slavery, such as lawsuits against railroad companies for illegally transporting slaves, slaves running away prior to being sold at estate sales, the appearance of slaves in court, the intersection of black and white cultures that occurred during the hiring of and trading with slaves, criminal indictment of slaves, and many other facets of the institution that reveal the intricate and often tenuous nature of slavery in Missouri.[12] Frank Ricks' story demonstrates the value of these court records in piecing together the lives of black Missourians—slave and free—and points us toward new questions and supplementary resources that will continue to enhance our understanding of Missouri's past.

NOTES

[1] Much has been learned from autobiographies written by former slaves and from the narratives of former slaves collected as part of the Federal Writers Project during the 1930s and 1940s. Although they are invaluable sources, they can be tainted by publisher bias, the author's agenda, and simply the vagaries of memory. Hence, the authenticity of the information contained in those sources can be legitimately questioned and must be critically used in conjunction with other sources. The Missouri slave narratives can be found online at http://www.umsl.edu/~munsr/focus/good/slaves/moslave.htm.

The secondary literature on American slavery is massive, yet the literature specifically on slavery in Missouri is limited, but growing. Many still point to Harrison Trexler's *Slavery in Missouri, 1804-1865* (Baltimore: Johns Hopkins University Press, 1914) as a definitive source and much of the more recent literature references Trexler heavily. Although Trexler's work largely perpetuates the romanticized version of slavery and its supposedly benign nature in Missouri that was popular at the beginning of the twentieth century, it does represent a great deal of research and provides very important groundwork for the study of slavery in Missouri. More recent dissertations, theses, books and articles that begin to dispel some of the myths regarding the nature of Missouri slavery include Donnie D. Bellamy, "Slavery, Emancipation, and Racism in Missouri, 1850-1865" (PhD diss., University of Missouri, 1971); Terrell Dempsey, *Searching for Jim: Slavery in Sam Clemens' World* (Columbia: University of Missouri Press, 2003); George R. Lee, *Slavery North of St. Louis* (Lewis County Historical Society, Missouri, 1999); Robert W. Duffner, "Slavery in Missouri River Counties, 1820-1865" (PhD diss., University of Missouri, 1974); R. Douglas Hurt, *Agriculture and Slavery in Missouri's Little Dixie* (Columbia: University of Missouri Press, 1992); Melton A. McLaurin, *Celia, a Slave* (Athens: University of Georgia Press, 1991); Harriet C. Frazier, *Slavery and Crime in Missouri, 1773-1865* (Jefferson, NC: McFarland & Co., 2001). Arvarh Strickland, "The University of Missouri—Columbia History Department: Training Scholars in the Black Experience," *Missouri Historical Review* 95 (July 2001), 413-430, is a fine review of University of Missouri theses and dissertations written on slavery and the African American experience. For free blacks in Missouri, see Donnie D. Bellamy, "Free Blacks in Antebellum Missouri, 1820-1860," *Missouri Historical Review* 67 (January 1973), 198-226. The reader should visit the *Missouri Historical Review*'s website to find many more articles on Missouri's African American history (http://shs.umsystem.edu/publications/mhr/index.shtml).

Case files of the St. Louis Circuit Court for the period 1866-1868 demonstrate that African Americans began to take advantage of their newly won citizenship by going to court for a variety of reasons and, thus, creating documentary evidence of their experiences. These records are housed and accessible at the Missouri State Archives-St. Louis.

[2] While uncommon, it is not unheard of to find depositions taken from slaves and free blacks during the antebellum period in Circuit Court case files in both civil and criminal suits. Slaves and free blacks were not allowed to testify against a white person, but their testimony was allowed in court in other circumstances. Such depositions are rich with details about slaves' lives and their relationships with other slaves, free blacks, and whites. A fine example of how court records can illuminate African American history is Georgena Duncan, "Manumission in the Arkansas River Valley: Three Case Histories," *Arkansas Historical Quarterly* 66 (Winter 2007), 422-443.

[3] The files reviewed are John Ricks, estate file, October 1853; John M. Ricks, estate file, October 1853; Jane Ricks, guardianship file, November 1864; Jane Ricks, estate file, January 1864; Lincoln County, Missouri, Probate Court. Frank Ricks' enlistment form is filed in Jane Ricks' estate file.

[4] Names of slaves were often recorded differently within the same file, and at times on the same document. This resulted from the prevalent use of nicknames for slaves, the lack of standardized name spelling and pronunciation, moderate literacy, and the fact that different persons recorded the names within the same file, persons who were not necessarily a part of the slaveholding family or were even acquainted with them.

[5] Most estate files for slaveholding estates in Franklin and Lincoln counties in Missouri contain ample documentation of slaves being hired out to generate income for the estate. See also John Hope Franklin and Loren Schweninger, *Runaway Slaves: Rebels on the Plantation* (New York: Oxford University Press), 17-21; James William McGettingan, Jr., "Slave Sales, Estate Divisions and the Slave Family in Boone County, Missouri, 1820-1865," (MA thesis, University of Missouri, 1938). Such disruption on the estate also prompted slaves to run away. For runaway slaves in Missouri, see Harriet C. Frazier, *Runaway and Freed Missouri Slaves and Those Who Helped Them, 1763-1865* (Jefferson, NC: McFarland & Co., 2004).

[6] See also *Descriptive Recruitment Lists of Volunteers for the United States Colored Troops for the State of Missouri, 1863–1865*, National Archives and Records Administration Microfilm Publication M1894, Roll 6 Frame 248. Frank is listed as the former slave of the heirs of John Ricks. Albert Ricks also appears on this list (Roll 6 Frame 296) as the former slave of Thomas Ricks and was likely the slave Albert that appeared in the Ricks' probate files. These were accessed online through the St. Louis County Public Library at http://www.slcl.org/branches/hq/sc/jkh/usctmo/recruits-reece.htm.

[7] Missouri State Archives, Soldiers' Records: War of 1812-World War I, Record of Service Card, Civil War, 1861-1865, Box 69, microfilm reel s874, accessed online at http://www.sos.mo.gov/archives/soldiers/details.asp?id=S262251&conflict=Civil%20War&txtName=ricks,%20frank&selConflict=Civil%20War&txtUnit=&rbBranch=all# <http://www.sos.mo.gov/archives/soldiers/details.asp?id=S262251&conflict=Civil%20War&txtName=ricks,%20frank&selConflict=Civil%20War&txtUnit=&rbBranch=all>. The Missouri State Archives also has a guide to its African American history collection online at http://www.sos.mo.gov/archives/resources/africanamerican/guide/table.asp. The MSA website also contains numerous digital collections and educational material useful for studying African American history. Ricks' military record card only indicates the date of death. His regiment's location and duty were found at The Civil War Archive, Union Regimental Histories, http://www.civilwararchive.com/Unreghst/uncolinf3.htm.

[8] 13 Stats. 11 (1864). The Secretary of War was to "appoint a commission in each of the slave States represented in Congress, charged to award to each loyal person to whom a colored volunteer may owe service a just compensation … payable out of the fund derived from commutations." A second act governing slave-owner compensation was passed in July 1866, 296 Stats. 321 (1866). Neither of these statutes indicates where the slave owner was to file his claim, whether at a county court, with the Provost Marshal, or elsewhere. Rudena Kramer Mallory, *Claims by Missourians for Enlisted Slaves* (Kansas City, R.K. Mallory, 1992) documents numerous compensation claims filed with the U.S. District Court in Kansas City. For a thorough treatment of the recruitment of slaves in Missouri, see John W. Blassingame, "The Recruitment of Negro Troops in Missouri during the Civil War," *Missouri Historical Review* 58 (April 1964), 326-337.

[9] Neither William Young nor Frank Ricks appears in the slave compensation claims held by St. Louis County Public Library, http://www.slcl.org/branches/hq/sc/jkh/slaveclaims/index-links.htm. His regiment, the 68th, is not included in that collection. The Preliminary Inventory of the Records of the Adjutant General's Office in Record Group 94 housed at the National Archives in Washington, DC, contains descriptions of registers that record slave compensation claims made in Delaware, Kentucky, Maryland, Missouri, Tennessee, and West Virginia. These records have not been microfilmed.

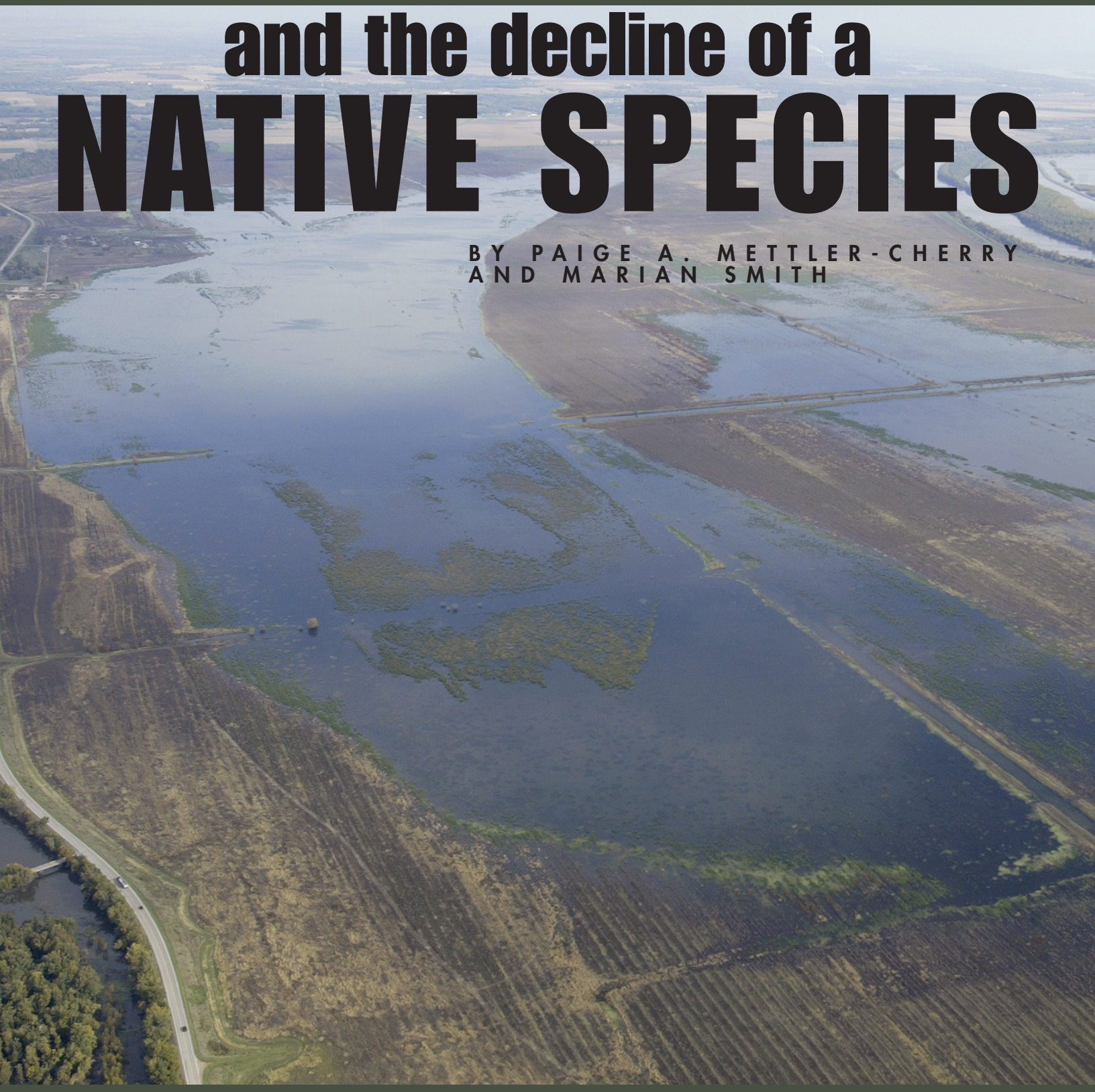
[10] See, for example, the estate file of John Thompson, Lincoln County Probate Court, February 1864. Thompson owned two slaves, Henry and Stephen, but the inventory noted that Stephen was "now run off in the US service."

[11] For example, the estate file of Charles R. Morris, Lincoln County Probate Court, September 1865, contains an affidavit from C.T. Grimmett in which Grimmett says he hired a slave, Frank, from Morris in 1864 for $150. Yet, "said Frank, taking the privileges allowed slaves about said time absconded from him on 23rd September," so he only paid Morris' estate for the time of service rendered by Frank.

[12] The Missouri Secretary of State Local Records Program has processed a very large quantity of court records throughout the state; records that have been microfilmed and are available at the Missouri State Archives in Jefferson City. Of particular interest for this region are the case file collections for the St. Louis Circuit Court (1804-1835, 1866-1868), St. Louis Probate Court (1804-1900), St. Charles Circuit Court (1805-1845), Lincoln County Circuit Court (1819-1840), Lincoln County Probate Court (1819-1860), and Franklin County Probate Court (1819-1845). The St. Louis court records are available at the Missouri State Archives-St. Louis. Several of the collections have been digitized and are available online through the Missouri Digital Heritage Initiative (http://www.sos.mo.gov/archives/mojudicial/).

The history of the ILLINOIS RIVER and the decline of a NATIVE SPECIES

BY PAIGE A. METTLER-CHERRY AND MARIAN SMITH



A very important advantage, and one which some, perhaps, will find it hard to credit, is that we could easily go to Florida in boats, and by a very good navigation. There would be but one canal to make …

Louis Joliet, 1674, making the earliest known proposal to alter the Illinois River (Hurlbut 1881)

Emiquon National Wildlife Refuge as it appears today. The corn and soybean fields (see page 38) have been replaced by the reappearance of Thompson and Flag lakes. The refuge already teems with wildlife, including many species of migrating waterfowl, wading birds, deer, and re-introduced native fish species. (Photo: Courtesy of the author)

Large river ecosystems are perhaps the most modified systems in the world, with nearly all of the world's 79 large river ecosystems altered by human activities (Sparks 1995). In North America, the Illinois River floodplain has been extensively modified and the flood pulse, or annual flood regime, of the river is distorted as a result of human activity (Sparks, Nelson, and Yin 1998). Although many view flooding as an unwanted destructive force of nature (mostly because of our insistence on living and working in floodplains that flood), the movement of water onto the floodplains (a flood pulse) is a natural process that restores and creates habitat for a tremendous diversity of species. It also provides other services such as sediment retention, groundwater recharge, nutrient storage and, paradoxically, flood abatement and storage. The study of flood pulses and their role in river-floodplain functioning was a concept first developed by scientists studying Amazonian floodplains and their role in river ecosystems (Junk 1982). These concepts have been applied to other large river ecosystems, including the Illinois River, giving us a much better understanding of the importance of keeping floodplains connected to their rivers.

The Illinois River and its basin form a unique ecological environment that was modified by substantial anthropogenic changes after non-indigenous settlement of Illinois. The dynamic nature of this system provided habitat for a wide diversity of floodplain species, including what was one of the largest commercial fisheries in the United States (Sparks *et al.* 2000). Although a large portion of the Illinois River floodplain habitat has been destroyed or severely modified, fifty percent of its floodplain functions as part of the river and provides a unique opportunity to study flood pulsing and the ecology of native species (Sparks 1995). We will discuss the recent history of the Illinois River and its basin, significant changes to the river system, and the effects of those changes on the threatened native plant species, *Boltonia decurrens*. Extensive research on this species serves to provide insight into the ecological functioning of the altered Illinois River system and provides a lesson on the consequences of habitat alteration and destruction.

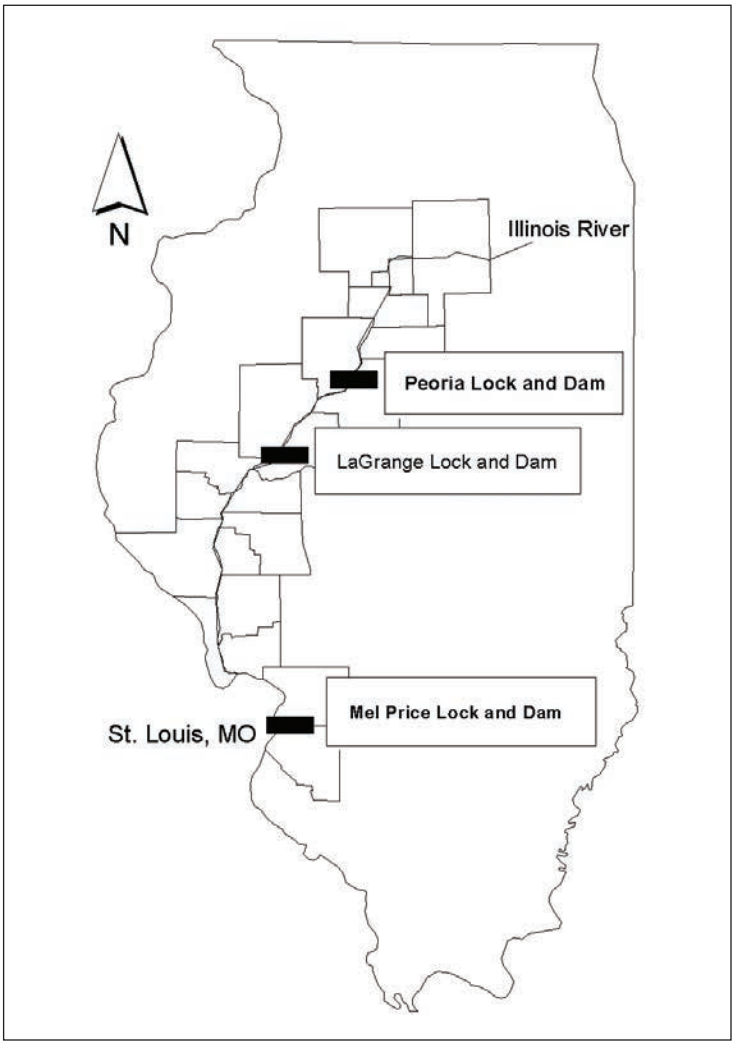
Description of the Illinois River and its Valley

To understand the importance of the Illinois River and its flood pulse to the floodplain communities, it is necessary to examine how geography and geology influence the hydrologic regime of this unique system. The Illinois River reaches from the confluence of the Kankakee and Des Plaines rivers, 45 miles southwest of Chicago, to just north of St. Louis, at the confluence of the Mississippi and Missouri rivers, spanning a total of 272.4 miles (Arnold *et al.* 1999; Barrows 1910; Warner 1998). Geologic formation and geographic structure of the river are sharply divided between the upper Illinois River and the lower Illinois River. The division occurs in the area known as "The Great Bend," approximately 63 miles below the head of the river. At this point in the river, the direction of flow changes from west to south as the river turns in a near ninety-degree angle at Hennepin, Illinois (Warner 1998; Arnold *et al.* 1999).

The upper Illinois Valley was formed during five major glacial periods, with the most recent glaciation occurring during the Wisconsinan glaciation 17,000-12,000 years ago (Arnold *et al.* 1999). The Wisconsinan glaciation occurred in three stages with the maximum extension of the ice occurring in the area of the Bloomington moraine south to Peoria. The subsequent advances and retreats of the glacier did not extend as far; however, they were the source for the abundant glacial water that carved the upper Illinois Valley as it drained from the proglacial Erie, Michigan, and Chicago lakes (Hajic 1990). Drainage from Lake Chicago (now the site of the city) was eventually diverted by glacial movement to present-day Lake Michigan and ceased draining into the Illinois River.

The lower Illinois Valley is much older than the upper and has been glaciated several times. The Illinoisan ice sheet covered much of Illinois, stopping 19.9 miles north of the Ohio River. The effects of the glacier are easily seen when comparing the flat agricultural fields of central and northern Illinois, which the glacier covered, to the Shawnee Hills of southern Illinois, where the glacier did not reach. The valley of the lower Illinois River is much broader and drained a greater volume of water during glaciation periods than it does at present. The pre-glacial channel that is now the lower Illinois River served as a drainage outlet for a much larger area than it does now (Horberg and Anderson 1950); prior to the Pleistocene glaciation, the ancient Mississippi River flowed through the lower Illinois Valley until the river was diverted to its present valley (Barrows 1910; Alvord and Burdick 1919; Mulvihill and Cornish 1929; Arnold *et al.* 1999; Warner 1998). To give a clear physical comparison, the width of the river valley above the Great Bend ranges from one to 1.5 miles, while below the Great Bend it ranges from two to five miles. The valley of the upper Illinois River is delineated by steep, rocky bluffs, while the valley of the lower Illinois River is bordered on the eastern bank by large, gravel terraces that resulted from deposition from glacial runoff (Sauer 1916).

Map of Illinois showing the historical distribution of *Boltonia decurrens* (counties outlined); and locks and dams on the Illinois and Mississippi rivers that control water levels at all *Boltonia decurrens* sites (black rectangles).
(Source: Smith, Caswell and Mettler-Cherry 2005)



In its unimproved condition the flow of the Illinois River was so irregular that in former years, it became a reeking slough in seasons of drought, and in flood-time discharged occasionally a volume of water forty times that of its normal flow (Sauer 1916).

As with the geology, there is a sharp differentiation between the gradient of the upper and lower Illinois River. Overall, the gradient of the Illinois River is very shallow, averaging 0.84 feet per mile (Hajic 1990). From the head of the river to Hennepin, the river falls 49.9 feet and from Hennepin southward to the mouth of the river at Grafton, the river falls only an additional 25.2 feet, for a total gradient of 75.4 feet from the head of the river to Grafton, where it converges with the Mississippi and Missouri rivers (Hajic 1990). This exceptionally low gradient will often result in the Mississippi River (with its larger volume and higher flow rate) acting as a dam on the Illinois, forcing water to actually flow upstream during periods of high water on the Mississippi (Sparks, Nelson, and Yin 1998). The shallow gradient, combined with a deep, wide valley, created a slow moving, aggrading river that, prior to human alteration, created and filled backwater lakes and sloughs repeatedly (Alvord and Burdick 1919). Typically, the Illinois had the highest flow rates during its regular flood season in the late winter and spring months, with low flow rates through summer, fall, and early winter. The average flow rate from 1890-1900 was 779.1 $ft^3 s^{-1}$, as compared to the modern Mississippi River which has an average flow rate of 572,000 $ft^3 s^{-1}$ (Alvord and Burdick 1919; N.P.S. 2009). President Thomas Jefferson had described the Illinois as "a fine river, clear, gentle, and without rapids; insomuch that it is navigable for batteaux to its source" (Jefferson 1787).

Human presence within the Illinois River Valley

The Illinois Indians were handsome creatures (Gray 1940).

Most discussions of indigenous people in Illinois begin with the Illiniwek, of which there were five tribes: the Peoria, the Kaskaskia, the Cahokia, the Michigamea, and the Tamaroa. By 1818 the Cahokia, Michigamea and Tamaroa had disappeared as distinct tribes, the remnants of the Kaskaskia lived on a 350-acre reservation near Kaskaskia, and the remnants of the Peoria lived in the upper Illinois River Valley (Buck 1967). As other American Indian nations were driven westward by non-indigenous settlers, the Illiniwek (later named "Illinois" by French traders who had difficulty pronouncing "Illiniwek") were displaced from their homelands by other Indians in the north, and white settlers from the south. After many years of conflict, the Iroquois broke the hold of the Illiniwek on the upper Illinois River Valley and the surrounding prairies. Much later, the retreating Iroquois drove out the Sauk and Fox, the Winnebago, the Kickapoo, and the Potawotami from their ancestral homes in Michigan and Wisconsin. Remnants of these tribes emigrated temporarily to northern Illinois lands, left by the annihilated Illinois tribes, until the few people left were driven westward again by non-indigenous soldiers and settlers. Eventually, they were forced onto reservations by the United States government (Bauxar 1959; Buck 1967; Kehoe 1981).

A great part of the territory is miserably poor, especially that near Lake Michigan and Erie, and that upon the Mississippi and Illinois consists of extensive plains which have not had from appearances, and will not have, a single bush upon them for ages. The districts therefore within which these fall will perhaps never contain a sufficient number of inhabitants to entitle them to membership in the Confederacy (James Monroe to Thomas Jefferson, 1786).

Wilhelm Lamprecht, "Father Marquette and the Indians." Louis Jolliet and Fr. Jacques Marquette in 1674 were the first Europeans to describe the Illinois River.
(Photo: Haggerty Museum of Art. Marquette University)

Human impact on the ecology of the river began after "discovery" of the river by the French clergyman Jacques Marquette and the French Canadian explorer Louis Joliet (Buck 1967). It was Joliet who made the earliest known proposal to modify the Illinois River by building a canal to connect the river to the Great Lakes (Hurlbut 1881). The French were the first non-indigenous settlers to traverse and live in the Illinois River Valley, and by 1679, Robert Cavalier (Sieur de La Salle) was establishing the first French colony, Fort Creve Coeur, at Lake Peoria. As did the American Indians before him, La Salle recognized the strategic advantage of the Starved Rock area with its high, rocky bluffs, and established Fort St. Louis des Illinois. After La Salle's death in 1687, the fort was left unprotected and was eventually abandoned (Sauer 1916). French fur trappers thrived on the abundant game found throughout the valley at this time, making it one of the most important fur-bearing areas of what was then the northwest territory of the colonies, with thousands of deer, bear, raccoon, muskrat, otter, and beaver pelts shipped out of this region (Buck 1967).

Despite early dismissal of the Illinois River basin as either a treeless desert (the prairies) or an inhospitable swamp (the wetlands), non-indigenous settlers began to populate the area. Illinois became a state in 1818 with a population of some 40,000, but the majority of these people lived in the southern region of the state, particularly in the area across the Mississippi River from St. Louis, and along the Ohio River (Starrett 1971). The Illinois River Valley had fewer than 2 people per square mile when statehood was granted by the federal government. In 1828, steam navigation was established on the river, making the valley easily accessible for additional human immigration. In 1840, the population of the Illinois River Basin was 109,000 (excluding Chicago), and by 1990 there were 8.5 million (Starrett 1971; Arnold *et al.* 1999). The sharp population growth after 1840 was the impetus for major changes in

the physical characteristics of the river and the valley surrounding it.

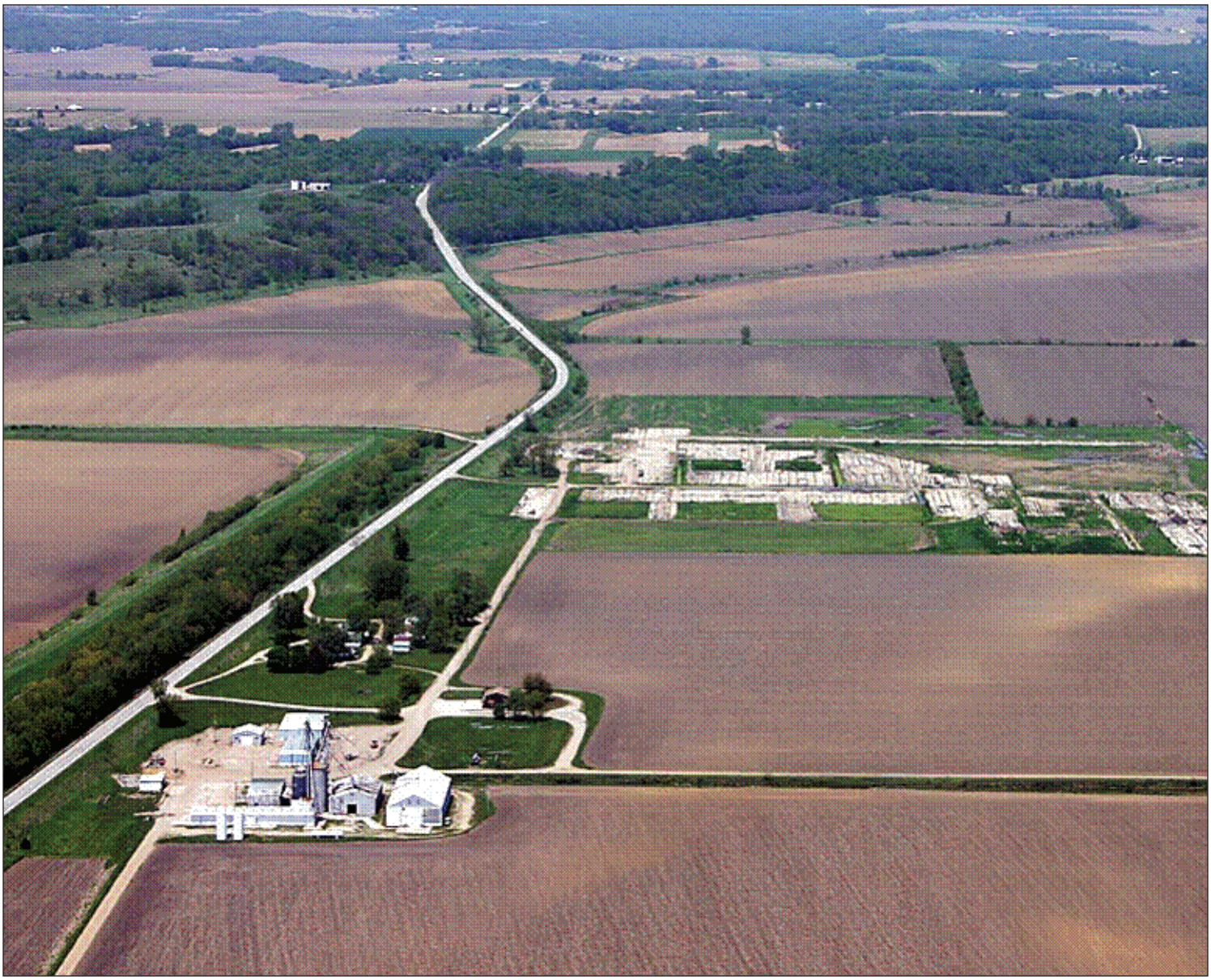
Major changes to the Illinois River and its floodplain

> ***It may be expected confidently that its [the floodplain's] reclamation will take place within a brief period and will add an important class of lands to those already farmed. (Sauer 1916)***
>
> ***It is a question of the first magnitude whether the destiny of the great rivers is to be the sewers of the cities along their banks or to be protected against everything which threatens their purity. (Justice Oliver Wendell Holmes, 1906, Missouri v. Illinois 1906)***

As the human population in the Illinois River Valley increased, political pressure also increased to open the water corridor first proposed by Joliet, thereby connecting the Great Lakes to the Gulf of Mexico, via the Mississippi. The Illinois and Michigan Canal was opened in 1848, but closed in 1907 due to competition from the railroads (Conzen and Morales 1989). The canal had a minor effect on the hydrology of the Illinois River, but the connection of the river to the Great Lakes had a far-reaching biological impact by creating the first corridor for exotic species invasion (Stoeckel *et al.* 1996).

After the Illinois and Michigan Canal was closed, pressure mounted to construct a much larger canal. Explosive growth of Chicago forced local officials to deal with a massive and deadly sewage problem. Raw sewage and garbage dumped into the Chicago River flowed past the Two Mile Crib, the source of Chicago's drinking water in Lake Michigan. Pumping failed to clear the sluggish Chicago River, but pushed the sewage downstream enough to create conflicts with other communities, and several deadly outbreaks of smallpox, dysentery, and typhoid caused thousands of deaths and panic in the city. Demand for a permanent solution resulted in formation of the Sanitary District of Chicago in 1889, and ground was broken for the Chicago Sanitary and Ship Canal in 1892. During construction, the State of Missouri

Aerial view of Wilder Farms and Stockyards before the property was purchased for the Emiquon National Wildlife Refuge by the Nature Conservancy and the US Fish and Wildlife Service. (Photo: Courtesy of the author)



moved to prevent the opening of the canal by filing suit with the U.S. Supreme Court. Sewage buildup on the Chicago River was so bad that in summer months, the river would crust over enough that chickens and dogs walked across the river. Missouri argued that the flow of water would dislodge the accumulated sewage along the river and send it downstream with the rest of the effluent where it would affect the Mississippi River, a principal water supply of Missourians. Before the issue was decided in court, Chicago Sanitary District Commissioners secretly destroyed the temporary dam separating the Chicago River from the Chicago Sanitary and Ship Canal in January 1900, to circumvent legal action that might prevent the opening of the canal (Miller 1996). The result was a complete reversal of the Chicago River and initiation of flow from Lake Michigan into the Illinois River, again connecting the Great Lakes to the Mississippi River (Moses and Kirkland 1895) and the Gulf of Mexico. The 28-mile canal runs parallel to the Illinois and Michigan Canal, with a depth of 35 feet. It is 160 feet wide at its narrowest and 306 feet wide at its widest and is larger than the Suez, Panama, and Erie canals (Miller 1996; Moses and Kirkland 1895).

The Chicago Sanitary and Ship Canal was successful in diluting raw sewage effluent generated by Chicago and diverting it downstream from the city's water supply, but not without the consequences feared by the State of Missouri. As a result of raw sewage moving downstream, a catastrophic pollution problem was created in the upper Illinois River, producing a dead zone with no aquatic life south to Chillicothe, approximately 142 miles southwest of Chicago (Mills, Starrett, and Bellrose 1966; Bellrose, Paveglio, and Steffeck 1979). By 1910, the zone was extending farther down river and was destroying the plant food sources necessary to support wildlife populations (Sparks 1984; Sparks *et al.* 2000). In 1922, the Metropolitan Sanitary District of Greater Chicago began operating the first sewage treatment plant, resulting in gradual improvement of water quality in the Illinois River.

The effects of the Chicago Sanitary and Ship Canal on the Illinois River and its ecology are profound. Present-day flow of the Illinois River is 62 percent higher since modification of the river began (Alvord and Burdick 1919; Arnold *et al.* 1999). The increased depth of the river attributable to the canal is 2.8 feet, which had the subsequent effect of increasing the area and depth of the bottomland lakes, also flooding bottomland forests. Prior to the opening of the canal, there were approximately 54,000 acres of bottomland lakes and marshes, and after the diversion, this increased to over 120,000 acres, or thirty percent of the estimated 400,000-acre floodplain (Forbes and Richardson 1919; Bellrose, Paveglio, and Steffeck 1979). This was soon to be reduced by the formation of levee and drainage districts throughout the Illinois River Valley.

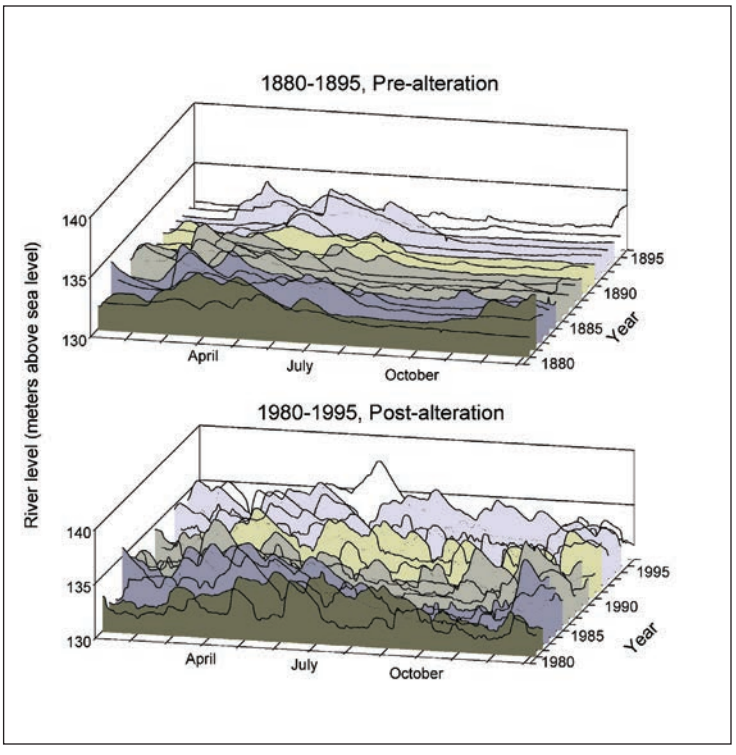
The history of wetlands drainage in the Illinois River Valley shows that privatization of a resource does not necessarily lead to conservation (Schneider 1996).

The backwater lakes and wetlands of the Illinois River Valley are a result of the unique properties of the Illinois River. The aggrading river formed low, natural levees along the shoreline that impounded floodwater into the backwater lakes seen throughout the valley (Alvord and Burdick 1919; Mulvihill and Cornish 1929). These shallow lakes take in water during periods of high flow and then draw down to low levels in the summer months, exposing large areas of mudflats that allowed the establishment of lush wetland vegetation critical as a food source for migrating waterfowl. The cyclical inflow of flood waters, deposition of sediment over the backwater areas, and lush growth and decay of vegetation, built an extremely rich, thick soil base that was later to be exploited for agricultural purposes (Alvord and Burdick 1919; Bellrose, Paveglio, and Steffeck 1979).

This highly productive and diverse environment made the area attractive to private and commercial hunters and fishermen. Up until the late 1800s, the backwater lakes and wetlands were considered a "commons" or area open to public use. As the population of the Illinois River Valley grew, use of these areas became more extensive. The attractiveness of these areas also came to the attention of affluent sportsmen from Chicago, Indianapolis, and Peoria, who increasingly purchased large tracts of floodplain to form private duck hunting clubs. The Swamp Land Act, passed in 1850, was the beginning of several legislative acts that accelerated the loss of the floodplain as public domain by giving the state title to the property in an effort to convert wetland areas to farmland. The state passed these titles on to the individual counties who sold the land. Privatization of the floodplain brought the landowners into direct conflict with local fishermen, hunters, and farmers who had used these areas for decades for subsistence (Schneider 1996). This conflict occasionally escalated into violence, with private wardens of the duck clubs confronting poachers who felt they had a legal right to be on the water. This belief was based on an Illinois law governing access to wetlands that essentially exempted trespassers when access was gained to an area via water connected to waters of the state (Schneider 1996). In other words, if you could get there by boat, you were legal. As litigation and security expenses increased, many of the clubs opted to convert their wetlands to more profitable agricultural land, ushering in rapid growth of levee and drainage districts throughout the Illinois River Valley. The first levee district was organized near Pekin in 1889 and by the late 1920s, some 204,916 acres of floodplain were behind levees. There are currently 54 levee districts in the Illinois River Valley (Bellrose, Paveglio, and Steffeck 1979; Thompson 1989).

The effects of channelization from levees are far-reaching throughout the valley. The wetlands were destroyed and converted to agricultural use, and by draining the water and destroying the vegetation, habitat for wildlife was destroyed (Bellrose 1945; Bellrose, Paveglio, and Steffeck 1979; Mills, Starrett, and Bellrose

Daily water-level hydrographs (meters above mean sea level) from 1880 to 1895 and from 1980 to 1995 measured at a USACE gage station located in the La Grange navigation pool
(Source: Smith, Caswell and Mettler-Cherry 2005)



1966). By eliminating access to the floodplain, water is confined to the main channel of the river, thereby increasing the height and velocity of the water (much the same as putting your thumb over the end of a garden hose) and increasing the period of inundation during floods when otherwise the wetlands would have held the water like a sponge until it could move through the soil to the groundwater (Mulvihill and Cornish 1929; Sparks 1995). Pollutants are concentrated in the main channel and sediment is flushed to the channel and carried downstream instead of being deposited on the floodplain (Sparks, Nelson, and Yin 1998).

Late year low flows combined with a shallow channel made it difficult to maintain consistent, navigable conditions for barge traffic on the Illinois River. In order to create these conditions, construction began on the Illinois Waterway in 1919 to create and maintain a larger, deeper channel nine feet deep and at least 300 feet wide from Lake Michigan to the Mississippi River. In 1930, the Nine-Foot Navigation Channel Project and the River and Harbor Act authorized the United States Army Corps of Engineers (U.S.A.C.E.) to finish the 75 percent completed State of Illinois project, and subsequently assigned responsibility for maintenance of the navigation channel to the U.S.A.C.E. A series of seven locks and dams was constructed in the 1930s ranging from ten to forty feet in height (Waller 1972). After the system was completed in 1939, the Illinois River became a series of navigation pools with each pool named for the dam immediately downstream (U.S.A.C.E. 1996).

The lock and dam system creates a wide range of conditions within the environment of the navigation pool itself. The upstream end of the pool is usually somewhat similar to what may be considered natural conditions, while the downstream end of the pool (just above the dam) is deeper and wider, causing permanent inundation of floodplain areas adjacent to the pool. By eliminating water recession in these areas, any chance for wetland vegetation to establish is eliminated (Mills, Starrett, and Bellrose 1966; Sparks, Nelson, and Yin 1998). Overall, navigation dams prevent the river from receding to the low water levels once a natural part of the regime. They hold water during low flow but, during large floods, the water retaining structures are lowered to the river bed and do not control floods. Although public attention focuses on major floods, the smaller spikes in water level caused by navigation dam operation have proven to have detrimental effects on the flora and fauna of the Illinois River system. Late season spikes in water levels, which have become more common, result in the loss of wetland vegetation that cannot adapt to ill-timed floods (Bayley 1991; Bellrose, Paveglio, and Steffeck 1979).

Agriculture was identified by the Illinois Environmental Protection Agency as the source of pollution for 99 percent of the impaired rivers, streams, and lakes (C.T.A.P. 1994).

Agriculture is the dominant land use in the State of Illinois, with 76.6 percent of Illinois land area in production and 82 percent of the Illinois River drainage basin used for agriculture (Arnold *et al.* 1999; Warner 1998). Within the Illinois River watershed, the types of crops produced have changed dramatically. Until 1925, row crops and cover crops shared equal acreage, but by 1987, row crops covered ninety percent of the agricultural area in the Illinois River watershed. Production of grassy cover crops such as wheat, oats, and hay has been replaced with row cropped soybeans and corn (Demissie, Keefer, and Xia 1992). The Critical Trends Assessment Program (C.T.A.P.) and the Illinois Environmental Protection Agency have identified row crop agriculture as the primary contributor to sediment load in the Illinois River and its backwater lakes, resulting in a muddy river replacing the "clear, gentle" river of Jefferson. Data collected by the U.S. Geological Survey show that on average, 13.8 million tons of sediment is delivered to the Illinois River Valley. The average outflow of sediment is 5.6 million tons, leaving 8.2 million tons deposited in the Illinois River Valley annually (Demissie and Akanbi 2000). The loss of buffering floodplain wetlands exacerbates this problem. Without wetlands, water runs off directly from the fields into the waterways instead of percolating down to the groundwater. The water carries the fine textured particles typical of Illinois soils with it, and the result is a much more rapid increase in water levels in the Illinois River with water that is muddy from the high sediment load. The sluggishness of the Illinois, as compared to the high flow rates of its tributaries, then contributes to sedimentation of the backwater lakes. By 1990, the backwater lakes had an average capacity loss of 72 percent (Demissie, Keefer, and Xia 1992). Sedimentation has also changed the bottom profile of the lakes to a shallow, bowl shape devoid of the habitat heterogeneity that helps to promote species diversity (Bellrose, Paveglio, and Steffeck 1979).

The overall effect of these combined changes has left the river unrecognizable as the lush, wildlife-rich system that greeted the first European explorers. The foundation of a river-floodplain system is the flood regime, and when that foundation is altered as it has been for the Illinois River, the effects on native species are profound. Until the early 1900s, the Illinois River was characterized by moderate, late winter-early spring flood pulses, followed by recession of water during the summer. Early year flooding provided nursery habitat for spawning fishes while low water levels during the summer months allowed for the establishment of emergent

wetland vegetation that was critical for feeding vast flocks of waterfowl as they migrated to their winter habitat. Today, the river has a chaotic, hydrologic regime with floods occurring at all times during the year, but most destructively during the late summer months, which is the critical growing season for floodplain plants that form the basis of the entire food web (Sparks 1995; Smith and Mettler 2002; Mettler-Cherry, Smith, and Keevin 2006). An understanding of the relationship between the organisms of the Illinois River Valley and the historical flood pulse regime helps to explain the endangered status of many Illinois River native species that have evolved to require the predictable, moderate flood events natural to the river system (Bellrose *et al.* 1983; Sparks 1995).

Boltonia decurrens, a fugitive species native to the Illinois River Valley

> ***Fugitive species are forever on the move, always becoming extinct in one locality as they succumb to competition and always surviving by reestablishing themselves in some other locality as a new niche opens (G. E. Hutchinson 1951).***

Fugitive species depend on frequent fluctuations in habitat to provide refuges in which to establish new populations (Harper 1977; Hutchinson 1951). The natural water-level fluctuations in large river-floodplain ecosystems create and maintain an early successional environment (Junk, Bayley, and Sparks 1989) ideal for the establishment and persistence of fugitive species. The historical cycle of annual, regular flooding of the Illinois River provided the mechanism that created this habitat (Sparks 1995). Established vegetation was removed by the inundation of floodwater, and subsequent recession from the floodplain wetlands renewed native herbaceous wetland vegetation. Modification of the flood characteristics of the Illinois River has reduced habitat availability for fugitive species (Smith, Caswell, and Mettler-Cherry 2005), which are particularly sensitive to habitat alteration and loss (Hutchinson 1951).

Boltonia decurrens provides a grim example of the consequences of disruption of the natural flood regime for species adapted to dynamic river habitats. It is a fugitive species that occurs only on the floodplains of the Illinois River and in the area of its confluence with the Mississippi River (Schwegman and Nyboer 1985; Smith and Keevin 1998). In spite of prolific seed production and the ability to reproduce vegetatively (Smith, Caswell, and Mettler-Cherry 2005), the number of naturally occurring populations, which fluctuates annually, has declined over the past 100 years (Schwegman and Nyboer 1985; Smith 1995, 2002). In 1988, the U. S. Fish and Wildlife Service (U.S.F.W.S.) placed *Boltonia* on the federal list of threatened species (U.S.F.W.S. 1988). It is currently listed as a "species of concern" in Missouri (M.D.C. 1999) and threatened in Illinois (Herkert and Ebinger 2002).

Boltonia requires an appropriately timed natural or human disturbance to create and maintain habitat (Schwegman and Nyboer 1985; U.S.F.W.S. 1990). Its historical habitat was in wet prairies, in shallow marshes and along the open shores of creeks and backwater lakes of the Illinois River (Schwegman and Nyboer 1985). Labels from nineteenth-century herbarium collections indicate that it grew in contiguous populations throughout the Illinois River Valley (U.S.F.W.S. 1990). Collections since 1970 are limited to human-disturbed ground near the Illinois River (Morgan 1980) and open, muddy edges of floodplain forests (Kurz 1981; U.S.F.W.S. 1990). Populations now occur in three disjunct clusters (See map on page 36) that are associated with the pools created by navigation dams—Peoria and La Grange on the Illinois River and Melvin Price (Lock and Dam 26) on the Mississippi River (Mettler-Cherry and Smith 2006). It is the general consensus of conservation personnel that the threatened status of *Boltonia* is due to a reduction in suitable habitat (Schwegman and Nyboer 1985; U.S.F.W.S. 1990; Smith, Caswell, and Mettler-Cherry 2005).

Flooding provides a regime that creates the high light environment required by *Boltonia* for germination (Baskin and Baskin 1988; Smith and Keevin 1998) and growth (Smith 1993). Seeds germinate readily on the surface of either water or moist soil if they are exposed to light; however, when covered by as little as 0.04 inches of silt, germination does not occur (Smith and Keevin 1998). The increased sediment load of the Illinois River (Lee and Bhowmik 1979) has reduced water clarity, and its deposition on the floodplain rendered areas once ideal for the establishment of *Boltonia* unsuitable for seed germination and population establishment. This was dramatically illustrated late in the summer of 1994, when heavy layers of silt, deposited by the 1993 flood, cracked and exposed the pre-flood soil surface. Seeds of *Boltonia* were exposed and germinated, with rosettes emerging from the crevices in August. Large areas between the cracks were devoid of seedlings, but by September, a small population of *Boltonia* rosettes had begun to mature and flower. Unfortunately, germination occurred so late in the season that few individuals flowered and produced seeds (Smith, Caswell, and Mettler-Cherry 2005).

The inflorescence of *Boltonia decurrens*. Each "flower" is actually several hundred individual flowers packed together in a receptacle. (Photo: Courtesy of the author)

Under ideal growth conditions (open areas with moist soil), *Boltonia* can reach a height of eight feet and produce up to 30,000 seeds per individual; however, if light is limited or seed germination is delayed by flooding during the critical growing season (June through October), plants often flower and die when less than eighteen inches tall (Smith and Keevin 1998). Seed production in these late-establishing plants is reduced to fewer than 100 seeds per individual (Smith and Keevin 1998). As seedling establishment and survival is extremely low (less than ~0.01percent) under good field conditions (Moss 1997), small plants have little probability of producing enough seedlings to create a new population in the spring. Newly emerged *Boltonia* seedlings are less than 0.25 inches across the span of the first leaves, and cannot compete for light with larger seedlings or established vegetation. They do not survive unless they become established on bare soil left by receding floodwaters (Smith and Mettler 2002).

Boltonia also reproduces vegetatively: rosettes are formed at the base of the senescing mature plant, and become nutritionally independent by the time the mother plant dies (Baker 1997). All plants that flower die at the end of the flowering season, and no persistent root stock is present from which plants may emerge the following spring; therefore, each new population must be established by new seedlings or vegetative rosettes that were produced the previous autumn. If the site is inundated by floodwaters too early in the fall, or if the population experiences a severe late summer drought, vegetative rosettes are not produced. Thus, vegetative reproduction, as well as seed production and seedling establishment, are dependent upon an appropriately timed flood and sufficient precipitation (Smith, Caswell, and Mettler-Cherry 2005).

The role of flooding in seed dispersal, germination and seedling recruitment has been firmly established for *Boltonia* (Smith and Keevin 1998). As floodwaters recede, seeds are deposited on the shores and seedlings become established in the bare mudflats. In 1994, after the Midwest flood of 1993 had cleared existing vegetation from vast areas of the Illinois floodplain, populations of *Boltonia* that had been near extirpation exploded in size (Smith 1995; Smith *et al.* 1998). At Gilbert Lake in Jersey County (1.6 miles from the river's confluence with the Mississippi River), a population that had consisted of fifty flowering plants in 1992 increased to more than 20,000 individuals in1994 (Smith *et al.* 1998). Because of the alteration of the hydrology of the Illinois River, the floodplain area exposed during periods of low flow has been reduced (Bellrose, Paveglio, and Steffeck 1979). Although germination of *Boltonia* readily occurs while seeds are floating on floodwaters, eventually the water must recede for seedlings to become established (Smith and Keevin 1998). The levees and navigation dams on the altered Illinois River serve to isolate seeds from suitable habitats and prevent the free flow of seeds along the river where they might have found a suitable niche.

Historically, annual flooding created the open habitat required for optimal growth of *Boltonia* by eliminating less flood-tolerant species and clearing away the litter cover produced by dead vegetation. Field observations and laboratory studies have shown that *Boltonia* has several adaptations to flooding that provide a significant advantage over potentially competitive, but less flood-tolerant, species. In areas where floodwaters have recently receded, *Boltonia* is often the only surviving species. In a laboratory study that compared tolerance to root-zone flooding in *Boltonia* and *Conyza canadensis* (an annual species that often invades *Boltonia* population sites), Stoecker, Smith, and Melton (1995) reported that after 28 days of flooding, survival was significantly greater in *Boltonia* as compared with *C. canadensis*. Roots and stems of *Boltonia* exposed to flooded conditions produced more oxygen-conducting tissue, which enhanced the flow of air from the above-water stems and leaves to the roots, preventing them from rotting. In subsequent studies, Stoecker (1996) demonstrated that *Boltonia* is capable of maintaining low rates of growth while completely submersed. Under conditions of reduced light, as would occur in sediment-heavy floodwaters, plants died (Stoecker 1996); therefore, the clarity of floodwaters is of critical importance to the survival of submersed individuals of *Boltonia*.

Clustered in a tight ring, vegetative rosettes are produced at the base of the senescing mother stem in the late fall. These rosettes will overwinter and then bolt and flower the following year as mature plants. (Photo: Courtesy of the author)

The alteration of the historical flood regime has destroyed habitat and isolated populations of *Boltonia* from the normal ebb and flow of the river floodwaters, resulting in its restriction to human-disturbed habitats (U.S.F.W.S. 1990; Smith and Keevin 1998). Because of *Boltonia*'s fugitive nature, it cannot be protected by standard conservation practices of isolating and protecting selected populations, or restored to its historical abundance without a comprehensive change in river management policies.

Restoration of the flood pulse to the Illinois River Valley

Various terms have been used to describe improvements made to river environments, all of them suggesting some level of restoration of ecosystem function (Brookes and Shields 1996). True restoration, as proposed by Cairns (1991), requires the re-creation of the structure and function of an ecosystem to pristine conditions. Little historical data are available for the majority of the world's large, temperate river-floodplain systems making true restoration an impossibility (Gore and Shields 1995); however, sufficient historical hydrological and ecological data are available concerning the Illinois River system to form a reasonable comparison with the pre-disturbance regime (Bellrose *et al.* 1983; Sparks 1995). Because of social and economic restraints, however, the complete reversal of human disturbance is not likely (Sparks *et al.* 2000). To be politically and economically feasible, any systemwide changes in the Illinois River must find a balance between navigation interests, farmers, recreational users and the rehabilitation and protection of the natural biota (Theiling 1995; Sparks *et al.* 2000).

If private owners are unwilling to accept limits on unsafe building practices in known hazardous areas, why should the nation hold them harmless from the results of their own free choice? (Platt 1994).

The United States has never viewed flooding from a systemwide perspective. Government agencies and individual communities have spent vast sums of money on a fragmented system of structural flood control measures (Wright 1996). The design of the district levee system in Illinois, whereby each district is given the authority to impose taxes to build and repair flood control structures, results in a patchwork of levees, with each district giving priority to its own immediate problems (Mulvihill and Cornish 1929; Thompson 1989). Downstream effects are seldom considered, as there is little incentive for the coordination of flood control efforts (Galloway 1995). What may prevent a flood in one district may ensure flooding downstream, thereby exacerbating flood losses on a large segment of the river (Larson 2009). This is a recurring pattern throughout flood-prone areas in the United States (Wright 1996). The government continues to offer financial incentives that encourage repetitive rebuilding in areas not suitable for construction and habitation (N.W.F. 1999; Larson 2009). The rebuilding of a larger and more "flood proof" levee in Chesterfield, following the devastating levee break and destruction of the 1993 flood, is an example of how the federal flood-protection policy operates. Is the Chesterfield area guaranteed 500 years of flood protection as suggested by proponents? The flood-protection rating of levees is based only on the *probability* of having a flood of that magnitude every 500 years, so each new flood season presents an unknown threat (Pilkey and Pilkey-Jarvis 2009; Larson 2009). Witness the 500-year flood of 1993, which, on portions of the Illinois River, was followed by another 500-year event in 1995. Every new or enhanced flood-prevention structure that is constructed increases the volume and velocity of flow and further exacerbates the extent and severity of flood damage. As long as the government continues to encourage habitation and development of natural floodplains, and uses taxpayer money to reimburse private losses, reconnection of the Illinois River to its floodplain will not be possible.

Although current practices are inconsistent with the restoration of a systemwide flood pulse, some conservation groups are planning and executing strategies for restoring the natural hydrology to some portions of the Illinois River. The Nature Conservancy (T.N.C.), in cooperation with the U.S.F.W.S., the Illinois Department of Natural Resources and a team of scientific advisors, has developed a strategic plan for the Illinois River (T.N.C. 2009). In 1997 and 2001, T.N.C. purchased property totaling 8,500 acres of former floodplain land on which they are reconnecting, through gates in the levee, the former floodplain to the river. As the hydrology of the reclaimed floodplain improves, plants and aquatic communities of the historical backwater lakes are being reintroduced. Because private ownership carries with it a significant measure of control over floodplain issues, these areas may serve as models to government agencies for the restoration of the flood pulse on public lands.

Although the former range and abundance of *Boltonia* is unlikely to be realized, its extinction may be averted by management regimes on these reclaimed floodplains. *Boltonia* is a target species for T.N.C. restoration, and studies of the dynamics of populations in the reclaimed areas will provide evidence of the benefit of a more natural flood regime to fugitive floodplain plants that may be applied to large floodplain-river systems throughout the country.

Mettler-Cherry on a research outing on the flooded Illinois River.
(Photo: Courtesy of the author)

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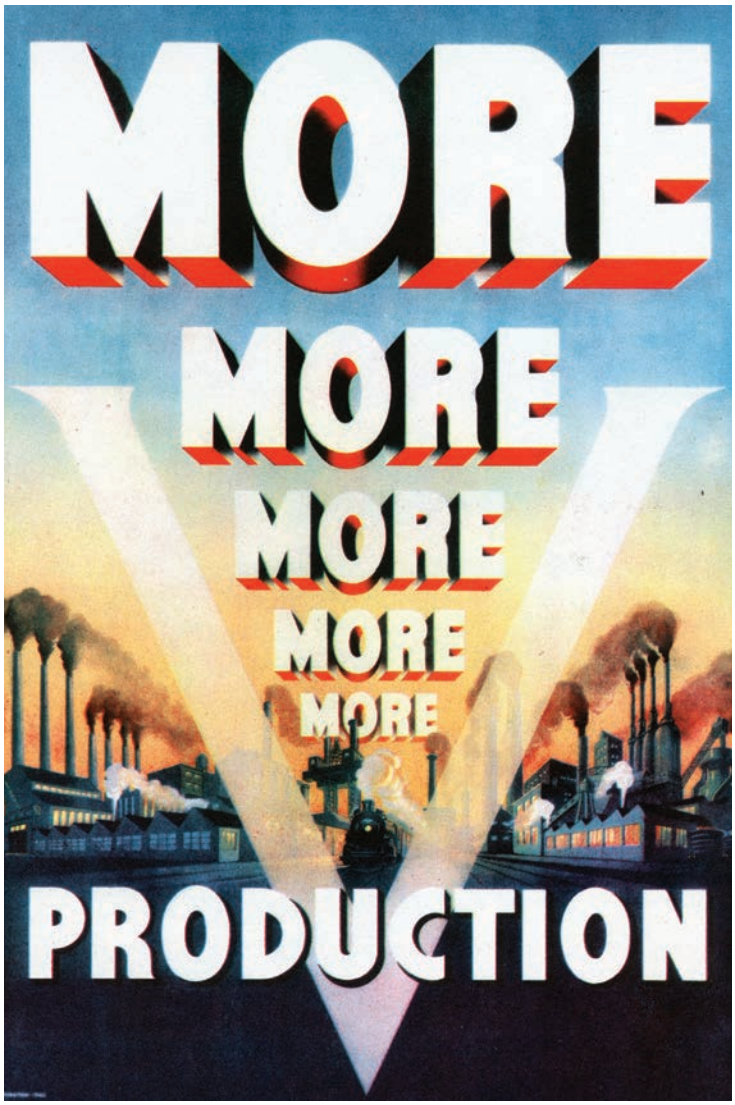
Mettler-Cherry on a research trip in the wetlands adjacent to the Illinois River.
(Photo: Courtesy of the author)

Worker Number 74530

BY KATE L. GREGG

Dr. Kate Gregg as she appeared when she became a "Rosie the Riveter" on the graveyard shift. (Photo: Mary Ambler Archives, Lindenwood University)



Some historians argue that American industrial capability and production was the crucial element in defeating the Axis powers in World War II, as suggested by this poster from General Cable, which had a factory in St. Louis.
(Photo: *Fight Talk*, 1945, General Cable Corporation; Mary Ambler Archives, Lindenwood University)

Kate Gregg (1883-1954) joined the faculty at Lindenwood College to teach literature in 1924, and developed a great love for both regional history and the American West. She edited a number of documents for publications such as the *Missouri Historical Review* and books, including *Westward with Dragoons* (William Clark's journal from his 1808 expedition to found Fort Osage) and *Road to Santa Fe: The Journal and Diaries of George Champlin Sibley*. She retired from Lindenwood College in 1949. She wrote the following about her work on the graveyard shift as a "Rosie the Riveter" at the St. Louis Ordnance Plant on Goodfellow for the *Lindenwood College Bulletin* in October 1943.

"Report for work at 11:45 tonight," said the clerk as he handed me my time-card. I was worker No. 74530 in the St. Louis Ordnance Plant, and that pale silvery face beneath the number on my badge looked enough like me to get me past the guards at the gate and door.

"Your job at this time is probably the most important work in the world,"—words of General Somervell floodlighted on the top of Building 205—singled me out that night as with the entering shift I moved down the hill toward my place in the production line. I threw back my shoulders. I breathed the night air with pride. Whatever the job was to be, I would like it whether I liked it nor not.

The young lady from the personnel office had eight or ten of us workers to deliver to our respective departments that night, and since mine was the most remote, I had a tour of the building before my job and I came together. It was well that the bracing words of the general had strengthened my resolution, for the tour, let me confess, was a bit terrifying. The place was immense. It swallowed me up. Enormous and terrible machines smiting the air with their unearthly poundings made me cower.

"These are the mills of the gods," I reasoned to myself. "They are grinding dictators exceedingly fine." Great furnaces spitting blue-green flames blew their hot breath upon me, and like Dante I would have retreated, but my fair guide crooked her finger at me.

"Your department," she yelled in my ear, "is farther on!"

After what seemed a long time we came to a place of comparative coolness and quiet. My guide led me to a clock fastened to a wire stockade. "This is your time-clock, Number 257. Where is your time-card?" and right there, I learned how to insert my card in the groove and give the quick sure punch that registers. After walking another block, my guide ushered me into the packing department, where I was to be a packing operator, whatever that might be.

But not in civilian dress. "Take this woman to the Safety Store, Julie, and help her get her outfit," ordered the dapper young foreman. And gazing at the papers I had placed in his hand, he said, "Hold on. Are you married or single?"

"Single," said I.

"That's nice," murmured my new boss.

And pondering that, I went with Julie to the basement of Building 204 to be equipped with brown coveralls, brown safety shoes with steel toes, safety glasses, and a villainous hairnet.

When I returned, all fitted out according to regulations, my foreman was busy. He threw an irritable glance in my direction and blurted out with considerable restraint, "Go over there and sit on one of those stools behind that table." There, with the help of kind women on both sides of me, I set to work making cartons and inserting the divider to hold the cartridges. After awhile, the foreman came over to our table. "Girls, this is Katie. She has come to help us out around here."

Then I made my humiliating faux pas. Remembering that the personnel man had said that my foreman would help me make arrangements for transportation, I began, "The personnel man said, Mr. Depew, that—"

"*Mr.* Depew!" He turned aside to laugh in sheer astonishment. "Oh, call me Harry."

He picked up some of the cartons that I had been making, examined them with some care, and remarked, "By golly, Katie, you're good." I immediately decided that Harry had a discriminating mind.

At two o'clock we had a fifteen-minute rest period. The cigarette smokers trailed off to their canteen. The others sat around on skids and talked, or dozed at the tables with head resting on folded arms. At four in the morning there was a half hour for lunch and we hurried on the double-quick to the canteen with something of the enthusiasm of youngsters when school is out. When the first streaks of dawn showed in the east, the solderers began to crow like roosters. The call passed with great variety from one part of the department to another and occasioned a merriment that never grew old. At six there was another fifteen-minute rest period—more heads on the tables now—and following that, the longest two hours of the night.

The double entendre of this poster—workers responding to requests for war material while also fighting back after a nation was provoked into war—was designed to keep employees in wartime factories motivated.

(Photo: *Fight Talk*, 1945, General Cable Corporation; Mary Ambler Archives, Lindenwood University)

When the women of the day shift came scurrying in to claim the most desirable tables and stools, we of the "graveyard shift" were glad to surrender our places and hurry out to find a place in the line forming to "clock out."

So passed the first night. I liked my job. I liked my bosses, Harry the foreman and Clarence the straw-boss. I liked the men and women with whom I worked. Nearly all of them were fathers or mothers of men in the service, and in their passing of the ammunition there was more than patriotism involved.

At the end of two weeks, after trying my hand at various tasks, I became a packing operator. I packed the loaded cartons, as they came from the drier, into the metal-lined box or chest in which they are sealed to go to the firing lines. With infinite satisfaction, I stowed the cartons in an ordered pattern and shoved the packed chest toward the conveyor belt which carried it to the solderers. From where I worked, I could see the ammunition boxes move along to the final inspector and click the counter that registers output as they each took their plunge down the chute. They were off to American boys on many fronts.

ABOUT THE AUTHORS

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William Glankler (*Slave and Soldier*) has been a Field Archivist with the Missouri Secretary of State's Local Records Program since 2006. He prepares nineteenth-century court records for microfilming and digitization in St. Charles, Lincoln, Franklin, and Warren counties, and he performs consultations with local governments and cultural institutions. He received his MA in History from Saint Louis University.

Born and raised in Missouri, **Mark Alan Neels** ("*We Shall be Literally 'Sold to the Dutch'"*) is intensely interested in that state's involvement in the American Civil War. Recently he received an MA in History from the University of Missouri-St. Louis, where his thesis on Attorney General Edward Bates was nominated for the Lewis E. Atherton prize in Missouri biography. He lives in Maryland Heights with his wife and Irish setter, and very soon plans to begin his work on his Ph.D.

Dr. Marian Smith (*The History of the Illinois River and the Decline of Native Species*) is a Distinguished Professor of Biology Emerita at Southern Illinois University at Edwardsville. She has worked for two decades on the demography, ecology, life history, and physiology of *Boltonia decurrens* and other rare and endangered plant species native to Illinois and Missouri.

A boyhood stamp collection launched **David L. Straight's** (*Against Pain*) adult fascination with collecting, researching, and writing about postal history as well as a delight in bringing long forgotten mail back to life. In addition to being the West Campus Librarian at Washington University in St. Louis, he is Vice-President of the American Philatelic Society and serves on the Museum Advisory Council for the Smithsonian National Postal Museum.

IMAGE RIGHT

Students at Lindenwood College left Irwin Hall for an air raid drill during World War II. For more on Lindenwood and the war effort, see Kate Gregg's "Worker Number 74530," inside.
(Photo: Mary Ambler Archives, Lindenwood University)

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