

THE NATIONAL PARK SERVICE EXPERIENCE YOUR AMERICA



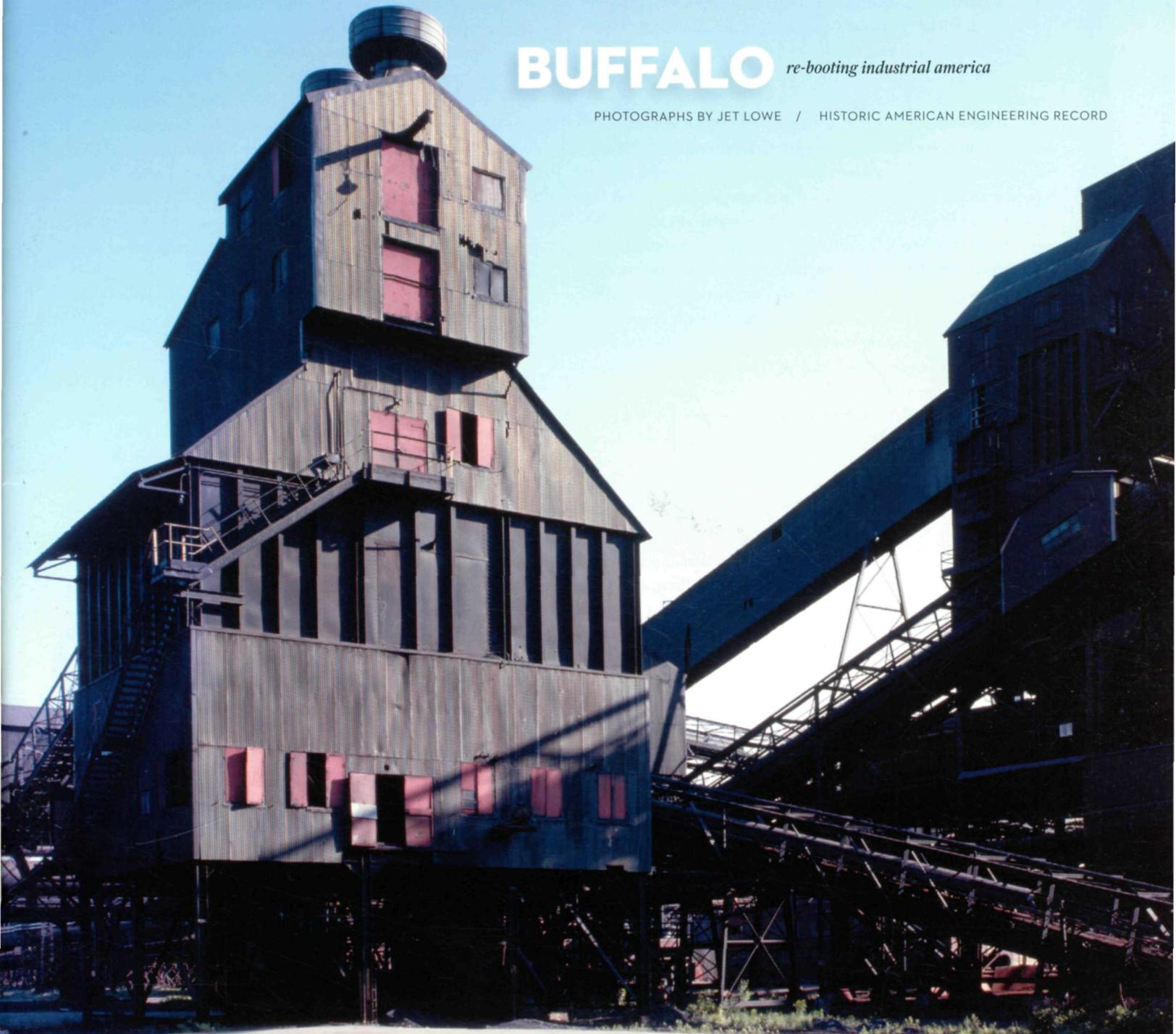
COMMON

PRESERVING OUR NATION'S HERITAGE SUMMER 2011

GROUND

BUFFALO *re-booting industrial america*

PHOTOGRAPHS BY JET LOWE / HISTORIC AMERICAN ENGINEERING RECORD



FIRST WORD

BY JOHN KNOERL

Through the Lens of Science

BACK IN THE SUMMER OF 1969 I worked for the now defunct Buffalo Awning and Tent Company on Broadway and Hickory, in the city that hosts this year's National Preservation Conference. I did installations all over town, a job that gave me a thorough knowledge of Buffalo's geography and streets. As I traveled around with my ladder, screwdriver, and drill, it was obvious that the city was declining and my attitude at the time was that there wasn't much worth saving.

MORE THAN 40 YEARS LATER, I'm roaming Buffalo's streets again. My tools are quite different, and so is my view. This time, I'm seeing the city as a preservationist, using remote sensing imagery, databases, and GIS to look down from a satellite in far off space, right now at a masterwork designed by Frank Lloyd Wright. These tools have brought new insight to my perspective on the city. **MY ATTITUDE IN 1969 WAS TYPICAL OF** anyone who grew up in the suburbs. In post-World War II Buffalo, major demographic changes were taking place. Returning veterans were leaving their old neighborhoods and moving to the suburbs. My parents were among them, moving from south Buffalo, a German-Irish enclave, to nearby Cheektowaga. Everything there was new. Nothing was old. This affected our ideas about what was valuable and what was not. We were taught that the city was in decay, that people were leaving, that the industrial plants were closing, that crime was getting worse. The riots on the east side of Buffalo in 1967 only reinforced this attitude. **THE IRONY OF COURSE IS THAT SINCE** developers were not interested in Buffalo, many of its neighborhoods were preserved. And over the course of four summers installing awnings, I began to appreciate the city's historic character. From elaborate Queen Annes to more modest two and three-bedroom stone-clad dwellings, Buffalo retains a remarkable degree of its old charm. While some of its streets are laid out in a grid pattern, like those of other cities, others intersect with the curvature of the famous system of Olmsted-designed parks. And I discovered that the awnings I was installing were a way people expressed pride in their houses. I still recall the impressive sight of a row of houses decked out in the colorful fabric on a summer's day. **YEARS LATER, AS HEAD OF A NATIONAL PARK SERVICE UNIT THAT** uses GIS in preservation, my view continues to evolve as I use the technology to study trends in several New York cities. There are a number of ways GIS plays into the preservation equation. In the case of Buffalo, I was curious about what the technology could reveal about home ownership and preservation. Each year, a state real estate agency issues an updated set of GIS data showing who owns individual homes, along with the owners' addresses. When the

addresses for the two do not match, it means the home is a rental. The information also includes property values, which a researcher can follow year to year as they rise or fall. **DOES HOME OWNERSHIP MATTER IN SUSTAINING** historic properties? I believe it does. Using GIS, I have mapped more than 10,000 properties in the National Register of Historic Places—not only in Buffalo, but in Yonkers, Albany, and Rochester. These I correlated with owners' tax data available through local real estate offices. Of these cities, Buffalo has the highest percent of home ownership, at 72 percent, while Albany, at 38 percent, has the lowest. This difference is also reflected in the number of historic buildings lost since they were listed. Albany has lost 10 percent, while Buffalo has lost only 2. Doubtless other factors are at work in determining whether a historic building is lost, but home ownership seems to play a role. **THERE HAS BEEN AN ARGUMENT GOING ON FOR YEARS** about preservation tax credits for homeowners. There is concern that such legislation only benefits the wealthy, or limits the number and type of properties that

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would be eligible. The argument has been largely fueled by anecdotal information. Now, for the first time, there is a comprehensive set of data. **THERE ARE TYPICALLY SEVERAL VERSIONS OF** a tax credit bill up for debate at any given time in the state legislature. Now, GIS can provide a picture of how a plan will play out in an entire city. We can actually show what the benefits of a given law would be, whether limited to 10,000 households, or a more politically defensible 100,000. And, beyond modeling a piece of legislation, it can track the effect once passed. Whether the goal is to encourage home ownership, increase property values, foster preservation, or all three, the bill's effect can be monitored year to year, and when the time comes to evaluate the success, you have a track record developed through GIS. **IN SHORT, SCIENCE TAKES THE POLITICAL WIND OUT** of the equation. And that is important in a city like Buffalo, where preservation seems to be booming, a place that, like my attitude about my native city, seems to have come full circle.

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Above: Design great George Nakashima—shown here with his parents—whose home and studio have joined the National Register of Historic Places. *Front:* Buffalo’s Bethlehem Steel Plant. *Back:* At work in one of the city’s grain elevators.

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Climate Crucible

Nature and Culture, Companions in Survival in Death Valley Web Exhibit

As far as is known, Death Valley was given its name by one of a group of prospectors lost on their way to the California Gold Rush. While the moniker caught on famously—apt in many ways—Death Valley, and its history, are full of life. It is, however, life on the edge, as depicted in a new collaborative online exhibit developed by Death Valley National Park and the National Park Service Museum Management

pinyon pine, and mountain mahogany. Though little rain falls in the valley, wildflowers transform the desert in a spectacular display of color. More than 1,000 kinds of plants live there, some with roots that go up to a hundred feet below the desert floor and others that have adapted by reducing the evaporation from their leaves and stems. There are 50 species found nowhere else in the world.



THE EFFECTS OF POLLUTION AND CLIMATE CHANGE ARE INCREASINGLY EVIDENT IN THE NATIONAL PARKS; DEATH VALLEY, THOUGH OVER 120 MILES FROM THE NEAREST MAJOR CITY, IS PARTICULARLY VULNERABLE.

Program. Using photos, stories, objects, and specimens from the park's collection, the exhibit offers an inside tour of the park and its history.

The valley's extremes have long attracted the curious, just as its stark beauty has drawn lovers of nature. While the Timbisha Shoshone lived in the area for hundreds of years before the Europeans, much of the more recent history revolves around the quest for valuable minerals. The ecology and geology are remarkable, and the exhibit helps viewers explore the science of this enigmatic landscape.

Flanked by the Panamint mountains on the west and the Amargosa on the east, the three-million-acre preserve is often assumed to be as void of life as its name implies. While the valley floor is forbidding, the surrounding terrain includes colorful badlands, sand dunes, and snowy peaks. The higher elevations contain woodlands of juniper,

ABOVE: *Hauling borax.* **RIGHT:** *Panamint daisy, a species endemic to the mountain range of the same name, collected in Wildrose Canyon in 1939.*

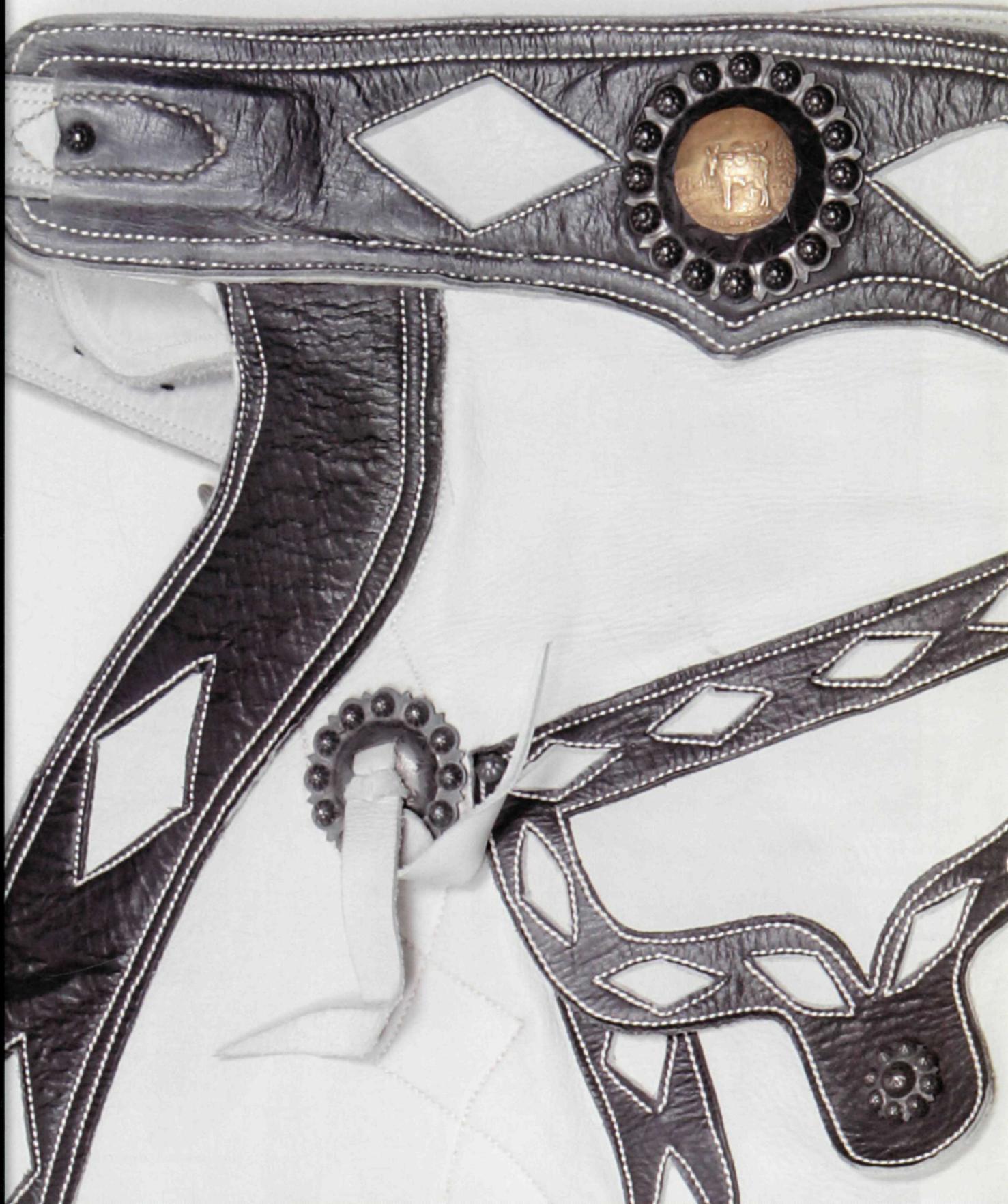
contact points **web** *National Park Service Death Valley Web Exhibit* www.nps.gov/history/museum/exhibits/death_valley/ *NPS Death Valley Teaching with Museum Collections Lesson Plan* www.nps.gov/history/museum/tmc/tmc_links.html#DEVA *Death Valley National Park* www.nps.gov/deva

The effects of pollution and climate change are increasingly evident in the national parks; Death Valley, though over 120 miles from the nearest major city, is particularly vulnerable. These threats are discussed in a section titled, "Science in Death Valley."

"We have a great number of species on the edge," says park ranger Terry Baldino. In an extreme environment, species are threatened by even slight shifts in temperature and precipitation. "One of the telltale signs is movement of plant communities as the temperatures change," says Kelly Fuhrmann, the park's chief of natural and cultural resources management. When plants migrate to higher elevations, the life they support likely follows, with repercussions throughout the ecosystem. But, says Baldino, "what happens if they have to migrate and can't go anywhere else?"

Distant cities are making their mark, too. "The night sky is critical to the experience here," says Fuhrmann. During the evening hours, Death Valley becomes one of the continent's darkest places. Yet research shows that light pollution from Los Angeles—five hours away—and Las Vegas—a two-hour drive—is having an effect. Likewise, urban smog can mask the spectacular views.





These 21st-century challenges, faced by almost every national park in America, appear incongruous in a place that seems to hint at the beginning of time. It was the 1848 discovery of California gold that first brought outsiders to the valley. Some among the thousands of migrants wound up facing this formidable obstacle. Their story of survival is one of the great chapters of Death Valley lore.

Planning the transcontinental railroad, surveyors and scientists discovered the region's unusual qualities: its location far below sea level, its plant and animal life, its rare minerals. The mining of gold, silver, copper, and zinc saw almost a century and a half of boom and bust. Towns and supply centers grew up around springs and streams. Some entrepreneurs established ranches to serve the mining industry, operations that developed into permanent settlements. Today, there are

It was the era of a most unusual legacy—that of con man Walter Scott, known as “Death Valley Scotty.” Scott convinced Chicago millionaire Albert Johnson to invest in a mysterious gold mine. Johnson, taken with the scenery and the larger-than-life character, built a sprawling mansion high in the cool remove of Grapevine Canyon. The Spanish colonial extravagance is a page from a storybook (see *Common Ground* summer 2004). “You think you’re in the Alhambra, you think you’re in Seville or Granada,” says Paul Dolinsky, who led a team documenting the place for the Historic American Buildings Survey.

Johnson immersed himself in this alternate existence, dressing as a Hollywood cowboy while enjoying the atmosphere he spent millions to create. Environmentally, the house was ahead of its time, with hollow-block masonry filled with Insulite—a type of early in-



TODAY, THERE ARE PLENTY OF GHOST TOWNS, PLACES LIKE CHLORIDE CITY, GREENWATER, AND SKIDOO, WHERE THE ROUGH-AND-TUMBLE OLD WEST WAS NO MYTH.

plenty of ghost towns, places like Chloride City, Greenwater, and Skidoo, where the rough-and-tumble Old West was no myth.

In the 1870s, prospectors discovered borax, a mineral used to make soap and cosmetics—so profitable it was eventually dubbed “white gold,” the catalyst for long-term development and the tourist industry. In 1883, the Harmony Borax Works opened at Furnace Creek, remnants of which remain at the park. Borax deposits were gathered from the desert floor, purified, and shipped to the railhead at Mojave via the 20-mule teams made famous in television commercials for Borax.

The exhibit features a wide collection of items from this era, including vintage advertisements and various containers of products made from the mineral. The operation only lasted five years. The miners left the artifacts of their presence, and many are featured in the exhibit.

Mining continued sporadically through the early 20th century. By this time, Death Valley was a popular tourist attraction. A scenic toll road was built in 1926 to bring visitors to a new resort at Stovepipe Wells. The Pacific Coast Borax Company built a campground and cabins for visitors to its works, followed by the Furnace Creek Inn and the Death Valley View Hotel to meet the growing demand.

sulation that kept it cool—and the water for a decorative fountain recycled through the walls, a form of air conditioning. While the promise of gold went unfulfilled, Scott remained a presence at “his” castle, abetting his reputation as a deep-pocket player. The Johnsons, around only during vacations, didn’t seem to mind.

By the time Death Valley became a national monument in 1933, it had been supporting a tourist industry for a decade. The exhibit depicts the era in postcards, advertisements, souvenirs, and other artifacts. The Civilian Conservation Corps improved roads, water lines, and other elements of the park’s infrastructure. In 1994, it was declared a national park and expanded by nearly 1.3 million acres.

From the earliest impressions of the first pioneers to critical contemporary issues, the online exhibit provides an in-depth look at this iconic Western park.

LEFT: Chicago millionaire Albert Johnson, who built the storybook Scotty’s Castle high in the valley hills, was enamored of Old West accoutrements like these ornamental chaps. **ABOVE LEFT:** Pocket watch from Death Valley’s mining era. **ABOVE:** Another Scotty’s Castle confection.

GRANT AT WORK

SAVE AMERICA'S TREASURES

OLD FORT NIAGARA The fort, near Lake Ontario, is one of New York state's premier landmarks, receiving a \$240,000 matching grant for roof and structural repairs along with other much-needed work. Built in 1755, Old Fort Niagara was pivotal in both the French and Indian War and the American Revolution. Located on a bluff above the lake at the mouth of the Niagara River, it was a strategic point in the struggle for control of North America. Today part of the state park system, its highly intact military architecture and fortifications—plus living history events, exhibits, and collections—attract more than 100,000 visitors a year.

BUFFALO STATE ASYLUM FOR THE INSANE One of the city's architectural treasures, the asylum—today being reborn as an architectural center, a regional visitors center, and a boutique hotel—is undergoing major rehabilitation with the help of an SAT grant. The spectacular Gothic complex, with its signature twin towers, was begun in 1870, and construction continued over 20 years. A collaboration between H.H. Richardson and Frederick Law Olmsted, its buildings and grounds were designed according to ideas on psychiatric care at the time. The rehab is being done by the nonprofit Richardson Center Corporation, with the state putting in \$76.5 million to leverage development and heritage tourism.

PAN-AMERICAN BUILDING When the Pan-American Exposition came to Buffalo in 1901, only one building was meant to be permanent, a scaled-down version of the Parthenon erected near Delaware Park's Hoyt Lake. The Pan-American Building, which served as the state pavilion, hosted an endless string of receptions for visiting dignitaries, among the eight million visitors wowed by the expo's demonstrations of a dazzling new technology, electric light. The structure, faced with Vermont marble with bronze entrance doors and sculptures depicting local history, was designed by local architect George Cary. Today it houses the Buffalo Historical Society. An SAT grant helped stabilize the portico and terrace walls.

contact point **web** NPS Save America's Treasures Program www.nps.gov/history/hps/treasures/

Darwin Martin House >>

Chicagoland will always be the mecca for Frank Lloyd Wright architecture, but second up might just be Buffalo. The architect bestowed the city with six notable residences—and the most impressive of the group, the Darwin D. Martin House Complex—is undergoing an unprecedented renovation seeded by a 2001 Save America's Treasures grant. Built between 1903 and 1905 for soap magnate Darwin Martin and his wife Is-



abelle, the site features all the trademarks of the Prairie style—horizontal lines, overhanging eaves, open interiors—as well as Wright's signature shaping of the total space. The commission, Wright's most elaborate in the style, is largely considered its premier example. "This is the project that catapulted him to international prominence," says Mary Roberts, executive director of the site, now a catalyst for heritage tourism. It is not just a house but a compound of six linked buildings including the main living quarters and conservatory, with a glass-enclosed pergola connecting the two; the Barton House, a smaller residence built for Martin's sister and brother-in-law; a carriage house with chauffeur's quarters and stable (later converted to a garage); and a gardener's cottage. A national historic landmark, the site symbolizes the architect's lifelong friendship with Martin. With Wright having done a house for his brother in Oak Park, Illinois, Martin got him the job of designing a building for the Larkin Soap Company, where he was an executive (a since-demolished masterwork). He was so taken with the architect that he had him design a house, too. Unlike those before it, this one had

ABOVE: A skylit sculpture of the Nike of Samothrace, focal point down a hall into the reconstructed conservatory. **RIGHT:** Isabelle Martin, circa 1912, arranging flowers in the Wright masterwork.





few monetary or design limits, allowing Wright to freely explore his emerging ideas. “The design of the tables and chairs, the stained glass, the mosaics around the fireplace . . . all of that was his opportunity to show what a total creation of space can be when it’s done in creative hands,” says the architect’s grandson in the documentary *Frank Lloyd Wright’s Buffalo*. Decades after, Wright even called the site, which boasts almost 400 pieces of his art glass, his “opus.” After having the architect create yet another masterwork (a summer estate, Graycliff, also an SAT recipient), Martin went broke in the stock market crash of 1929, barely able to pay the property taxes. He passed away in 1935, followed by his wife 10 years later. Eventually everything was razed but the main quarters and the Barton House. Purchased by the State University of New York at Buffalo in 1967, it was used for a wide range of school activities, Roberts



LEFT AND ABOVE: Two views of the complex, a million-dollar grant recipient.

says. In 1992, the school donated the site to the non-profit Martin House Restoration Corporation. An ambitious rehab and reconstruction, overseen by Hamilton Houston Lownie Architects, began in 1996. A million-dollar SAT grant went to foundation repairs; installation of HVAC, fire protection, and security systems; and restoration of masonry, tile, and concrete. All the structures are standing again, and include a new interpretive center. When the restoration is complete, the complex will look just as it did in 1907. “The house is a lynchpin for architectural tourism in western New York,” says Roberts, receiving around 25,000 annual visitors. “This is a smart growth investment that will pay for itself.”

ABOVE, RIGHT BIFF HENRICH COURTESY MARTIN HOUSE RESTORATION CORPORATION

TAX CREDIT

FEDERAL DOLLARS IN SUPPORT OF PRESERVATION

HOTEL LAFAYETTE Once one of the nation's top hotels, Buffalo's Hotel Lafayette is undergoing a \$35 million rehab with the help of federal historic preservation tax credits. The seven-story Renaissance-style building—designed by Louise Blanchard Bethune, the nation's first professional female architect—was intended to accommodate tourists expected for the 1901 Pan-American Exposition, but financial setbacks delayed its opening until 1904. The Lafayette, conceived as an A-list destination, offered hot and cold running water and telephones for every guest. Just a few years after its opening, an addition doubled the occupancy. The hotel declined over the decades, utilized most recently for short-term emergency housing, among other uses. In its new incarnation, the Lafayette will include apartments, a one-stop wedding destination, and a boutique hotel. Like many prominent Buffalo buildings, it owes its second chance to the city's recent revitalization.

ALLING AND CORY WAREHOUSE Thanks to federal historic preservation tax credits, the Alling and Cory Warehouse—a 1910 industrial building in downtown Buffalo, abandoned in 2001—is slated to become a mix of studio and one-and-two-bedroom apartments. The building, a manifestation of the city's rise as an industrial power, is an early example of the use of reinforced concrete and a trend toward open space, the latter complementing its new use. The warehouse, listed in the National Register of Historic Places, was rehabilitated by Schneider Development LLC at a cost of \$15.5 million. Used by students of nearby Erie Community College, it projects to draw young people to the increasingly vibrant downtown, a renaissance fueled in part by the city's architectural charm and attractions like the Omsted-designed park system.

to qualify for tax credits *The new use must be income producing, the structure certified as historic, and the rehab in accordance with the Secretary of the Interior's Standards for Rehabilitation. The credit equals 20 percent of the qualified rehab expenses. The National Park Service administers the tax credit program with IRS.*

contact point **web** www.nps.gov/history/hps/tps/tax/index.htm

Delaware Avenue Church >>

It is one of Buffalo's finest examples of ecclesiastical architecture, listed in the National Register of Historic Places and rescued from the fate of so many 19th-century American churches, thanks in good measure to recording artist and native Ani DiFranco. Delaware Avenue Methodist Episcopal Church, designed by local architect John Selkirk, is a landmark High Victorian Gothic structure that visually dominates the neighborhood, significant for what the National Register calls its "high artistic value." Once



facing the wrecking ball, the church has been rehabilitated as a state-of-the-art concert venue (DiFranco on stage, right) and offices for her record company, the \$10 million project accomplished thanks to federal historic preservation tax credits. The church was built in two phases, the 1871 chapel first, the rest between 1874 and 1876. A place of such artistry was fitting for a

city on the rise. Buffalo was the western terminus of the Erie Canal, which transformed it from a village into the way station for much of the commerce between the East Coast and the interior of the country. By 1830 it was the nation's leading inland port, the shipbuilding capitol of the Great Lakes. With the Industrial Revolution, Buffalo became a center for manufacturing and heavy industry. But by the 1870s, older parts of the city were no longer desirable and a fashionable neighborhood sprung up along Delaware Avenue. The congregation approached Selkirk, who had already shaped much of the downtown. High Victorian Gothic was at its peak. Featuring aspects of the earlier Gothic Revival, its visual extravagance was not restricted to places of worship but also animated museums, banks, courthouses, and other public buildings. Selkirk was a prime purveyor of the style. His design of the church captured the style's essence, in the words of the National Register nomination combining "a richly textured gothic exterior with an auditorium-like worship space rooted in the Protestant meeting house tradition. The integration of these historically opposed design approaches into a visually and functionally cohesive church building is emblematic of the picturesque tastes and architectural

ABOVE: Foliated finials inside Buffalo's renovated Delaware Avenue Church. **RIGHT:** Recording artist Ani DiFranco, a city native and key player in the renovation, performs in the space.





RECHRISTENED AS “BABEVILLE,” THE FORMER CHURCH, ACCORDING TO DIFRANCO’S WEBSITE, SERVES AS “A SHINING EXAMPLE OF HOW HISTORIC PRESERVATION WORKS IN BUFFALO.”

creativity of the Victorian era.” The stained glass was made by a local firm, Booth and Reister. The church’s decline paralleled that of the avenue, widened in 1924 for development. Many trees were lost that gave the road its character, along with a number of buildings. When the Depression hit, a long exodus began. The population decreased, and places emptied. While the church was home to other congregations, none had the money to maintain it, and it was finally acquired by the city. As stones began falling from the tower and façade, the church was slated for demolition. A coalition of activists, preservationists, and residents mobilized to save it. DiFranco and Righteous Babe Records, her record company, helped organize a group to preserve the church, halting the demolition and raising funds to assist the city with emergency repairs. DiFranco and Scot Fisher, her record company’s president, offered to buy the church, transforming it into offices and a performance venue. The pair paid for the rehabilitation of the interior, plus maintenance, with the city handling the exterior repair and structural stabilization. The church is now a first-rate concert hall, seating 500 on the floor and another 300 in the balconies. It is also rented out for lectures, receptions, business gatherings, and celebrations. The Hallwalls Contemporary Arts Center has a space, including a gallery and film-screening room. Rechristened as “Babeville,” the former church, according to DiFranco’s website, serves as “a shining example of how historic preservation works in Buffalo.”

LEFT: Stage at the restored church. ABOVE: Tables set up for an event.

ABOVE © JIM BUSH, ABOVE RIGHT LORI JOYCE



handmade modern

GEORGE NAKASHIMA, SEEKING THE SOUL OF NATURE BY JOE FLANAGAN

It is all precision and polish, evoking Eastern simplicity, Shaker asceticism, and an elegance at once timeless and of its time. It frequently calls to mind something out of Tolkein. It is furniture as high art, whose stylistic eloquence far exceeds its function, giving voice to the exuberant creativity of its maker. The work of George Nakashima has been exhibited at the Metropolitan Museum of Art in New York, the Museum of Fine Arts in Boston, the Victoria and Albert Museum in London, and the National Museum of Modern Art in Tokyo. His furniture is highly prized, valuable not only for its inherent merits but for its association with the artist himself. For these reasons, and more, Nakashima's house, studio, and workshop, located in rural New Hope, Pennsylvania, were recently listed in the National Register of Historic Places. The buildings themselves are notable as rare and idiosyncratic local examples of the International Style, while the small complex is famous as the center of Nakashima's remarkable life.

Above: Coffee table made of English oak burl, 1965. Left: Interior of Nakashima's Conoid Studio, New Hope, Pennsylvania.

LEFT WILLIAM A. SMITH, RIGHT GEORGE ERML, BOTH NAKASHIMA WOODWORKER STUDIO ARCHIVES

TUCKED AWAY OFF A WINDING ROAD, THE PLACE IS SURPRISINGLY MODEST, THOUGH A LOOK AROUND SOON REVEALS the boundless energy and vision of a man in headlong pursuit of his passion. The buildings—designed and built by Nakashima himself—include a showroom, a guesthouse, workshops, and a vast warehouse of exotic wood. Primarily situated on a south-facing rise above a broad grassy swale, they reveal what Michael Gotkin, author of *Artists' Handmade Houses*, describes as “the unlikely marriage between American vernacular influences and Japanese sensibilities, along with a willingness to embrace the engineered forms of the modern age.” Nakashima’s ability to blend these influences account for his work’s beauty and expressiveness, and this can be said of both his buildings and furniture. Spare and simple, built with modest materials, his creations reflect a fascination with engineering and a love of simple craftsmanship.

Though Nakashima died in 1990, the whine of a table saw evokes a legacy that is very much alive. As in his time, the place functions as a boutique woodworking shop, today operated by daughter Mira, an architect who worked alongside her father since she was a child. While the complex is surrounded by the Pennsylvania countryside, there is a prominent Japanese flavor in the shallow pitched roofs, exposed rafter tails, and minimalist exterior details. The traditional elements contrast strikingly with the geometric starkness and abundance of glass that mark the modern influence. This can be seen most dramatically in the arched and cantilevered features of the Conoid Studio (1958) and the sweep of the plywood barrel-vault roof over the pool house (1960).

The Arts Building—constructed to display the work of Nakashima’s friend, artist and social activist Ben Shahn—is a singular modern presence among the trees with its sharply sloped, saddle-shaped roof, designed as a hyperbolic paraboloid.

By the end of his life, Nakashima was considered one of the great furniture designers of the 20th century. When New York Governor Nelson Rockefeller was furnishing his house overlooking the Hudson, he sent his helicopter to New Hope to collect Nakashima. The designer’s list of awards is long and his influence profound, which is why the modest setting is a bit of a surprise. But understatement was a key part of Nakashima’s work. Mira and staff reproduce designs conceived by her father, with some variations. *What you get with a Nakashima piece is not just artistry and workmanship. You get a piece of the Nakashima story, which is extraordinary in itself.*

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BORN IN SPOKANE IN 1905, NAKASHIMA STUDIED ARCHITECTURE AT THE UNIVERSITY OF WASHINGTON. HE SPENT A year in France at the Ecole Americaine des Beaux Arts in Fontainebleau, where he won an award for his lithographs, watercolors, and etchings. Some of these early indicators of his creative versatility are on display at New Hope. The architect-turned-woodworker had a startling facility for drawing, which, obviously, was appreciated by his French instructors.

He was awarded a scholarship to Harvard’s Graduate School of Design in 1929. He was dismayed to learn that the program was based on the ideas of Walter Gropius and the Bauhaus School, too steeped in theory for his taste. He was more interested in technical and practical

Above: Walnut bench, 1974. Right: Nakashima’s signature butterfly joints in a table made of English walnut.



He learned to dismiss the idea of “perfection” in favor of a beauty that would flow naturally from the hands of the maker.



ABOVE GEORGE ERMIL/NAKASHIMA WOODWORKER STUDIO ARCHIVES, RIGHT JOHN BIGELOW TAYLOR



concerns. So after two weeks at Harvard, he approached the faculty at MIT about a scholarship. Thanks to a confluence of luck and talent, he was awarded one. Nakashima graduated the following year with a master's in architecture, then made a turn that characterized his searching nature. He took a job painting murals for the New York State capitol building, and then for the Long Island State Park Commission. Unemployed as the Depression set in, he headed across the Atlantic on a steamship to Paris. Near his apartment in Montparnasse, the Pavillion Suisse, an early masterwork by Le Corbusier, was going up. Watching the process was formative. He was intrigued by Le Corbusier's use of concrete, by the forms he devised and how they were reinforced. In the hands of Le Corbusier, concrete was a malleable material, and Nakashima took note.

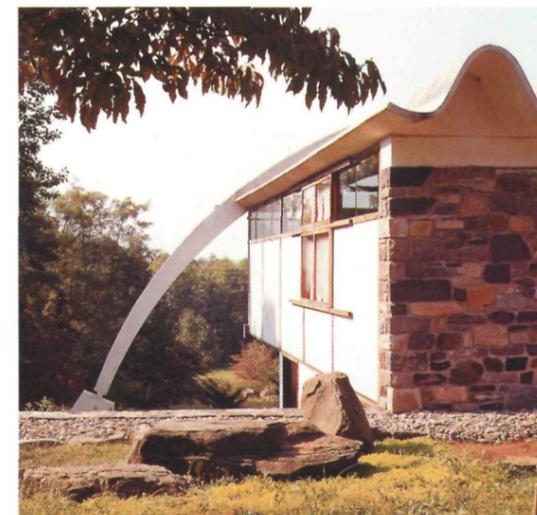
The year 1936 found him in Japan, working at the Tokyo architectural firm of Antonin Raymond, a modernist and disciple of Frank Lloyd Wright. Nakashima immersed himself in traditional Japanese architecture and culture, embracing the Mingei Movement, an attempt to re-infuse Japanese identity into design and the arts, influenced by the principles of Buddhism. The lessons he learned were evident throughout his life. His refusal to sign his work, for example, may have sprung from a pursuit of humility. The experience profoundly influenced his view of the creative process, and his concept of beauty.

From a Zen perspective, the act of making art is mystical. Mira, in her book *Nature, Form, and Spirit*, writes, "He [believed] that it is not through conscious effort or willful artistry but through non-conceptualization, or *mushin*, that true beauty is achieved." He learned to dismiss the idea of "perfection" in favor of a beauty that would flow naturally from the hands of the maker. In an era that was seeing the handmade replaced with the manufactured, Nakashima intentionally went contrary to form. "Much of what he did was a protest against the dehumanizing effects of mass production," his daughter writes.

Antonin Raymond's work in Japan, a fusion of Modernism and traditional Japanese architecture, likewise left its mark on the young Nakashima. "Raymond was one of the groundbreakers of western architecture in Japan," says Mira. In the 1930s, wood was the primary construction material; "master carpenters called the shots," she says. But with the introduction of concrete, architects became a necessity.

IN 1937, RAYMOND'S FIRM WAS COMMISSIONED TO ERECT A DORMITORY FOR THE SRI AUROBINDO ASHRAM, INDIA'S FIRST reinforced concrete building. Nakashima was sent to oversee the project. Already much attuned to Buddhist spiritualism, he was a sympathetic participant when he arrived at the ashram in Pondicherry. The following two years were life-changing. Nakashima managed the project in a sweltering climate where nothing of the kind had been tried before; materials had to be shipped from Japan. He became a devotee of Sri Aurobindo and remained so until the end of his life, donating his salary to the ashram over the course of the construction. The grueling task became an exercise in spiritual development. Ever watchful against the encroachment of ego, he viewed his work as prayer and devotion. His design of the building—including a cast concrete barrel vault roof to aid ventilation and insulation—he saw not as a monument to personal talent but as a collaboration with a higher power, an enabling of a transcendent good.

He was intrigued by Le Corbusier's use of concrete, by the forms he devised and how they were reinforced.



He was intrigued by Le Corbusier's use of concrete, by the forms he devised and how they were reinforced.

Above: Exterior of the Conoid Studio. Left: Eastern and local Pennsylvania elements in Nakashima's studio.

LEFT ANITA CALERO, ABOVE G. WILLIAM HOLLAND, BOTH NAKASHIMA WOODWORKER STUDIO ARCHIVES



Woodland fantasy and modern expression inhabit the same piece.

NAKASHIMA RETURNED TO TOKYO IN 1939, WHERE HE MET THE WOMAN WHO WOULD soon be his wife, Japanese American Marion Okajima. The international situation was unstable. Antonin Raymond closed his offices and left Japan. Nakashima and his wife returned to the United States, settling in Seattle. He worked for an architectural firm as he indulged a growing passion for working wood. In exchange for teaching carpentry, a priest let him use the basement of the Maryknoll Boys' Club as a shop.

In 1942, the Nakashimas and their extended family—including his mother and father—were interned along with thousands of other Japanese Americans. At a relocation camp in Minidoka, Idaho, he met Gentaro Hikogawa, a seasoned carpenter who taught him the virtues of traditional Japanese hand tools and joinery.

In 1943, Antonin Raymond successfully petitioned for his release. The architect had secured some government contracts, but Nakashima was not allowed to contribute. Raymond put him to work on his farm in New Hope. In this contemplative setting, Nakashima digested the injustice to his family while giving himself over to his passion for woodworking. He set up shop in Raymond's milk house, designing a stool and table that are still staples in the Nakashima line. He struck a deal with a Quaker farmer for three acres of land in exchange for carpentry work. He and his family lived in a tent on the site as he began erecting a workshop.

Once that was finished, he built a house, its traditional elements mingling with the modern in the tendency to blur the line between outdoors and in. Native materials such as fieldstone became signature elements in his architecture. As his furniture business grew, Nakashima acquired more property, and the Japanese-modern hybrid style was repeated with variations in future buildings. In 1954, he built a showroom and office, which won an award from the American Institute of Architects. Other structures followed: the Finishing Department in 1955, the Chair Department in '56, the Conoid Studio in '58, the Arts Building in '67. The Japanese elements, the simple and the rustic, merged with the sleek and the daring of modernism to create an atmosphere that is almost playful. In places there is the feeling of folk art. Firmly ensconced in Bucks County, where Americana dominates, the uniqueness is clear.

Above: Nakashima's Plank Coffee Table, 1947. Right: Living room of his house.

ABOVE GEORGE ERML/NAKASHIMA WOODWORKER STUDIO ARCHIVES, RIGHT ALSO THE ARCHIVES





NAKASHIMA'S FIRST FURNITURE DESIGNS WERE CLEARLY SHAKER-INFLUENCED. THERE was not just a stylistic similarity, but a philosophical one as well. The simple functionality and lack of ornament. The virtue of honest craftsmanship. The work also evoked Buddhist, Hindu, and ancient Japanese antecedents. Butterfly joints, while not uncommon in woodworking, became a signature element. Nakashima made them oversized, and frequently of a darker, more exotic wood than the rest of the piece.

He took to incorporating wood's idiosyncrasies. Burls, knots, and holes became part of a piece's identity. He didn't want to dominate the wood, but to let it live on in a new form. His slab tables were the most dramatic example—thick and broad, made of entire trees sliced lengthwise, connected by butterfly joints. The outer edges retained their natural form.

Shortly after the war, Knoll Associates, the New York City furniture manufacturer, proposed that he design for mass production. After much hesitation, he agreed, but retained the rights to make the same pieces by traditional methods. Knoll already had arrangements with designers such as Isamu Noguchi, Eero Saarinen, and Ludwig Mies van der Rohe. The work heightened his exposure, as did his inclusion in a 1951 exhibit at the New York Museum of Modern Art. Frenchman's Cove, a Jamaica resort, commissioned him to build all its furniture.

The New Hope complex continued to grow. Ideas that didn't have an outlet in furniture found expression in building projects. He experimented with concrete in the repeating waves of the roof for the Conoid Studio. Concepts often migrated from one medium to another. His "Conoid Series" furniture line featured "daring architectural elements such as a cantilevered seat, angled back support, and thin floor runners," in the words of the National Register nomination.

Many of Nakashima's contemporaries used modern materials for their very modern designs. It was a time of stark geometry, of squares, triangles, and rectangles repeated in city blocks and sophisticated living rooms. Saarinen's plastic furniture favored curves and circles suggestive of space travel. The fact that Nakashima worked in wood—that he embraced the organic character of his medium—made him stand out. Woodland fantasy and modern expression inhabit the same piece. "He believed in low-tech," says Mira. "He believed in hands-on." In the 1960s and '70s—an era of "back-to-the-land rhetoric and practice"—Nakashima became a seminal figure in a growing studio furniture movement, writes Thomas Denenberg, chief curator of Maine's Portland Museum of Art. "His ability to articulate a sophisticated, environmentally sensitive philosophy of design based on Eastern influences struck a resonant chord."

In the 1970s, working with his dear friend, architect Junzo Yoshimura, Nakashima produced what Mira describes as "a distillation of classical Japanese aesthetics" in the house for Governor Rockefeller. Nakashima designed a series of one-of-a-kind pieces—not intended for reproduction—at the time the largest collection of his work in the United States.

NAKASHIMA HAD ARRIVED, JOINING ELITE DESIGNERS WHOSE PIECES COULD FETCH tens of thousands of dollars. He grudgingly agreed to start signing his work. Clients wanted the name, to show they owned a real Nakashima. None of this changed his modesty. His introspective nature remained a feature not only of his personal makeup but of his work. There is something peaceful in his smooth, simple shapes, and even when they display bursts of style, if there is any extravagance, it is all nature's. He remained committed to his craft, undistracted by success.

He built a house for Mira within view of the complex. "At night, I'd look across the road and see the lights on in the lumber shed," she says. "He was playing with the lumber. For relaxation and entertainment he'd go out and clear the woods behind my house."

Now a convert to Catholicism, Nakashima was commissioned to design or furnish a number of sacred spaces: St. Martin's Catholic Church in New Hope; a chapel for the Sisters of Charity in Greensburg, Pennsylvania; the Monastery of Christ in the Desert in New Mexico; one in Mexico and two in Japan. His work—much to his pleasure, it seemed—was immersed in the spiritual. In the mid-1980s, he got an idea to build a series of altars. He envisioned each to be installed in a non-denominational place of worship on one of the world's continents. It was his way of encouraging inter-faith communion. As Nakashima described it, "peace in a tangible form instead of an abstract idea . . . a shrine for all peoples and owned by no one." He called them "Peace Altars." The first—roughly ten by ten feet, made of two sections of a walnut tree connected by butterfly joints—was put in the Cathedral of St. John the Divine in New York. Benefactor Steven C. Rockefeller and the ecumenical Dean James Parks Morton sponsored the work.

Nakashima died in 1990. The Peace Altars were a fitting final project for a man his daughter describes as "a citizen of the world, a Hindu-Catholic-Shaker-Japanese American." Mira and her brother Kevin continue the effort under the Nakashima Foundation for Peace. One altar has been placed in the Russian Academy of Art in Moscow. Another is planned for the Desmond Tutu Peace Centre in Cape Town, South Africa.

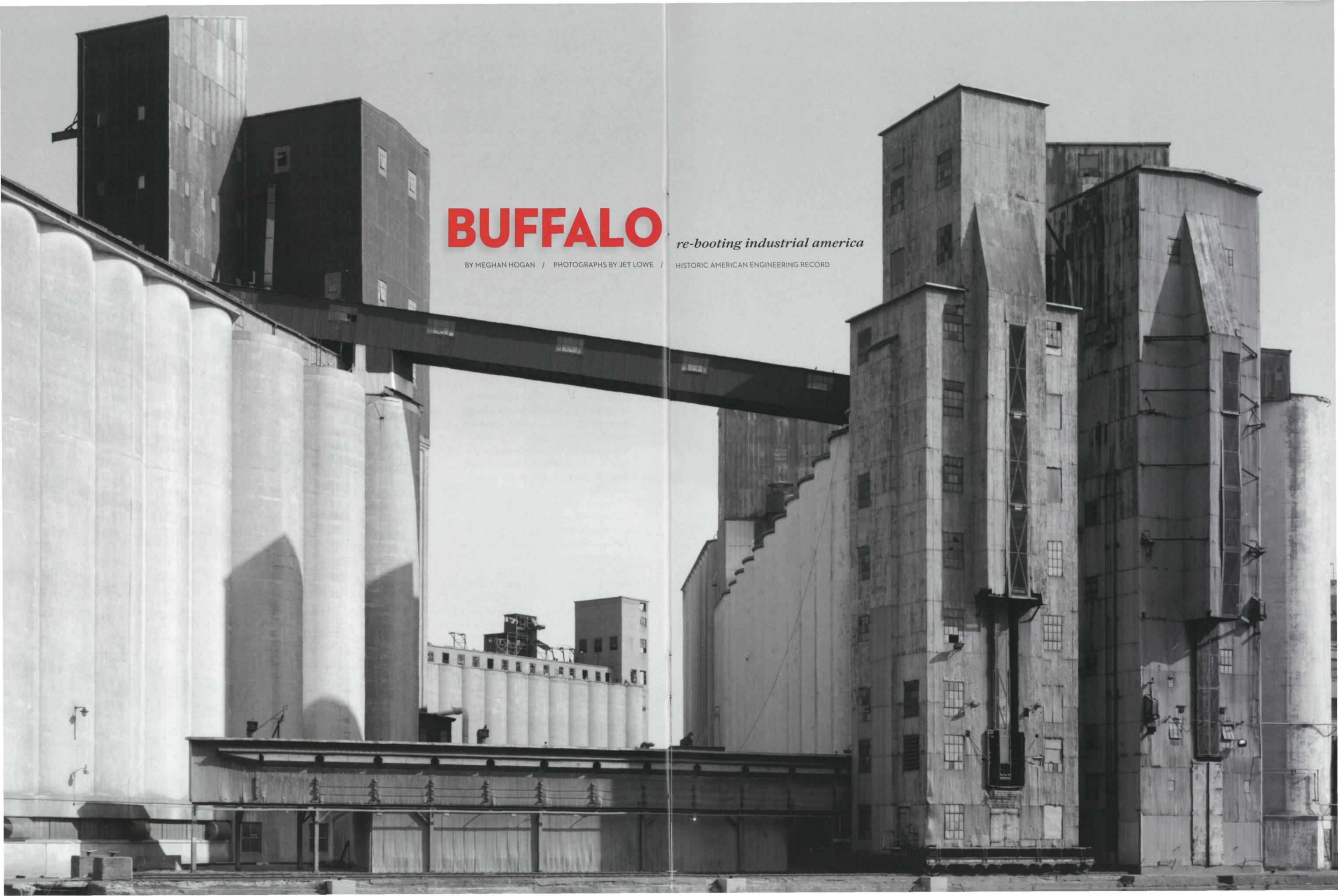
In the meantime, activity at the workshop goes on, and the pieces are as singular today as when they were designed. In them one sees the happy randomness of nature and the precise skill of the technician. One can sense the artist's love of simplicity and his tendency to push the edge of things—not only in his work but in his inner experience. Nakashima's fullness of spirit is very much alive here, as is his legacy, which is why the complex at New Hope is now honored among the nation's great places.

contact points **web** *National Register of Historic Places Nomination* www.nps.gov/history/nr/feature/weekly_features/NakashimaHouse-Studio.pdf
George Nakashima Studio www.nakashimawoodworker.com.

Above: Ode to sculptor Noguchi, in walnut. Left: Traditional Japanese elements.



There is something peaceful in his smooth, simple shapes, and even when they display bursts of style, if there is any extravagance, it is all nature's.



BUFFALO

re-booting industrial america

BY MEGHAN HOGAN / PHOTOGRAPHS BY JET LOWE / HISTORIC AMERICAN ENGINEERING RECORD

UNLIKE MANY AMERICAN CITIES, THE FORSAKEN REMNANTS OF BUFFALO'S INDUSTRIAL PAST HAVEN'T ALL BEEN LOST TO THE BULLDOZER.

Water is life.' Those are words from the Secretary of the Interior's recent *America's Great Outdoors* report—with its concern for preserving our nation's waterways—and for Buffalo, New York, site of this year's National Preservation Conference, truer ones have never been spoken. For visitors today, there is the waterfront for sailing, boating, and fishing (Lake Erie is the "smallmouth bass capital of the world,") and of course just north Niagara Falls, which attract millions yearly. There's also the Buffalo River and Erie Canal Harbor, "the gateway to the west," with the Erie Canalway National Heritage Corridor and the Niagara Falls National Heritage Area both central to Buffalo's quest for revival. But water's significance runs deeper than such attractions, for historically it is the lifeblood of the city itself, having—through the grain transport and steel industries—transformed what was once a small trading village into the "Queen City," the state's second largest metropolis after the Big Apple. "The canal is central to Buffalo," says Sam Magavern, co-director of the Partnership for the Public Good, a think tank dedicated to restoring the city's vitality. "It's why industries grew up here in the first place." Unlike many American cities, the forsaken remnants of Buffalo's industrial past haven't all been lost to the bulldozer. Just take a trip on one of the canal boat tours and you can see a veritable museum collection of grain elevators, hulking skywards like abandoned skyscrapers. One, owned by General Mills, continues to permeate the downtown with the oaty smell of Cheerios as it has daily since 1941.

Some still operate, but many stand only because it's not easy to tear down a reinforced concrete structure. "It's almost easier to leave them," says Richard O'Connor, chief of the Historic American Engineering Record, National Park Service, which has documented the elevators with large-format photography, measured drawings, and a written history.

And left they've been, along with the question of their future. The silos, some 150 feet tall, are an ode to Buffalo's former role as America's largest grain transporter. With the city's prime location as the eastern-most point of Great Lakes navigation, it's where the 363-mile-long Erie Canal, built between 1817 and 1825, started as a gateway for cargo, revolutionizing transport. No longer did Midwest grain have to be shipped from New Orleans, or slowly transported in carts across mountainous terrain, often spoiling in the process. Now it could be shipped via canal east to the Hudson and on to the populous eastern seaboard. After the canal's construction, freight charges for grain dropped from \$100 a ton to \$10 a ton. For Buffalo—which hadn't seen an ounce of grain before—it was suddenly key to the growth of the city. "It established Buffalo as the principal link between the Atlantic and the interior of North America, a vital place where people, produce, and manufactured goods shifted back and forth," says Beth Sciumeca, director of the Erie Canalway National Heritage Corridor.



ALL PHOTOS JET LOWE/NPS/HAER

PREVIOUS PAGES: *Three grain elevators: the Perot, the Marine "A", and the American.* ABOVE: *The Great Northern Elevator with the Merle M. MC Curdy and tug boats.*



ABOVE: The circa 1897 Electric Grain Elevator, looking southwest. The Electric, demolished in 1984, was one of the world's first electrically powered grain elevators.

JUST TAKE A TRIP ON ONE OF THE CANAL BOAT TOURS AND YOU CAN SEE A VERITABLE MUSEUM COLLECTION OF GRAIN ELEVATORS, HULKING SKYWARDS LIKE ABANDONED SKYSCRAPERS.

For the Irish immigrants who had to hand-deliver the grain from the docks to the canal, the process was slow, laborious, and often dangerous, given the explosive nature of grain dust. Off-loading could take hours and the city's harbor was perpetually clogged until 1842, when Buffalo entrepreneur Joseph Dart revolutionized grain transport yet again. With the help of engineer Robert Dunbar, he invented the world's first grain elevator, an ingenious structure with an elevating "marine leg" mechanism and a belt-bucket system that allows for the continuous movement of grain up into the elevator for storage. The idea was spun off from a system used with textile and flour mills. It was a big hit with grain shippers, desperate to speed things up.

The immigrants became "scoopers" who, after the marine leg was lowered into the ship hold, scooped the grain up into the elevator with help from a complex system of ropes and pulleys. It was a very prominent job around the turn of the century, says Lorraine Pierro, president of the Industrial Heritage Committee, Inc., adding that Buffalo was the last American city to employ them. Explosions remained common, and many of the elevators, made of wood, were lost to fire. Eventually they gave way to a "Concrete Atlantis," as architecture critic Reyner Banham called it, the cluster of concrete and steel towers rising in their place. "Fantastic and unreal!" noted the *Buffalo Morning Express* in 1899 of their rapid ascent. "They seem like monstrous mushroom growths, sprung in a moment from the water's edge, and ready as suddenly again to disappear."

Grain processing got a big boost when nearby Niagara Falls began producing cheap electrical power, and in 1897 the Electric and the Great Northern, the world's first electrically powered grain elevators, further modernized the industry. The boom didn't last, however. In 1932, Ontario's Welland Canal, large enough to handle boats directly from the Great Lakes, greatly reduced grain shipments to Buffalo. The death knell was the opening of the St. Lawrence Seaway—big enough to accommodate ocean vessels—in 1959. Most grain processors eventually left the region, along with other affected industries, leaving a rust belt economy struggling to make a comeback.

The Buffalonian view of the structures still standing is mixed. Some would like them to disappear; others hope they last forever. "The idea that they are going to last as long as the pyramids is kind of a rosy view," says Thomas Leary, a Youngstown State University professor and a historian for some of the HAER documentation. Saving the elevators—despite the steep cost of demolition—is going to be hard. They sit on prime waterfront property. Five have been lost to the wrecking ball since 2000. The 75-year-old H-O Oats Elevator was replaced with a Seneca casino

in 2006, the same year the H.R. Wait-designed elevator, once home to George Meyer Malt & Grain, the largest maltster on the East Coast, was torn down due to extensive deterioration. Last spring, part of the GLF Elevator Complex came down, called a safety hazard by its owner despite some reports to the contrary. Demolition attempts have repeatedly been made on the Great Northern—the last “big box” grain elevator still standing in North America, operated by Archer Daniels Midland—with only the city’s preservation board standing in the way. It remains one of the nation’s largest flourmills.

Most elevator owners are not receptive to adaptive re-use, given the cost, but projects around the country have shown it can be done. Thirty-six Quaker Oats silos in Akron, Ohio, were transformed into a luxury hotel featuring 196 perfectly round guest rooms; a Philadelphia elevator is now a mix of offices and penthouses; and a grain complex in Carrollton, Texas, has become the tallest indoor climbing gym in North America. Just using the ground floor and sealing off the rest is an option, points out Tim Tielman, Executive Director of the Campaign for Greater Buffalo History, Architecture, and Culture: “The galleries are magnificent architectural spaces that are also very flexible.”

His group is of the mind that reuse isn’t necessary for preservation. “The Coliseum of Rome hasn’t had a use for 2,000 years,” he says. Indeed, the elevators inspired early modernist architects like Erich Mendelsohn and Walter Gropius just as the monuments of the old world did for their predecessors. “They do have an almost Egyptian monumentality in many cases, and in abandonment and death they evoke the majesties of a departed civilization,” writes Banham in *A Concrete Atlantis: U.S. Industrial Building and European Modern Architecture*. “They deserve far more respect and honor than they commonly receive in America, for—as much as the work of a Richardson or a Wright—they represent the triumph of what is American in American building art.” And today, because of Mendelsohn’s influence, “all the German students know about our grain elevators,” says Pierro in reference to the sellout boat tours her organization has offered for the last 26 years.

“The first question people ask is whether they can go inside,” she says. The answer is no, they can’t, but the many images online suggest that where there’s a will, there’s a way. Pierro’s group, which funded the HAER work—which was used to mount an exhibition—is working on a waterfront trail so that Elevator Alley, as the area is known, can be seen on foot.

‘There’s a big thrill in going into a place that feels like a time capsule,’ says Steve Duncan, a New York City-based urban historian who explores and photographs derelict sites around the world, once visiting Buffalo as host for the Discovery Channel’s *Urban Explorers* program. He not only paid a visit to the Concrete Central Grain Elevator, but also the Art Deco-style Central Station, closed since 1979; the Gothic-style Church of the Transfiguration, closed since 1993; and the drain underneath the Scajaquada Creek. Duncan says “industrial boomtowns” like Buffalo, ripe with vacant infrastructure, are rich with attractions. Indeed, the city has a reputation for its wealth of abandoned structures, a magnet for urban exploration, or “urbex.” And while the trend remains somewhat controversial in the preservation community—urban explorers do sometimes vandalize and steal—Duncan points out that there’s a good thing about people wanting to explore historic ruins, even if just for the thrill. Many who

start out “hopping fences” go on to become preservationists. The photos and stories they collect, as part of a burgeoning online community, have created a virtual encyclopedia for audiences who wouldn’t otherwise seek out written histories—or even care—about these places. “It’s a shallower approach, but it’s more digestible,” Duncan says of such documentation. Unfortunately, the attention comes too late for one of the nation’s iconic industrial sites, but thanks to the Historic American Engineering Record its story lives on.

THEY SEEM LIKE MONSTROUS MUSHROOM GROWTHS, SPRUNG IN A MOMENT FROM THE WATER’S EDGE, AND READY AS SUDDENLY AGAIN TO DISAPPEAR. —THE RISE OF THE GRAIN ELEVATORS. IN THE WORDS OF THE BUFFALO MORNING EXPRESS, 1899



RIGHT: A view of the mushroom columns inside the Superior Elevator.



ABOVE: Dismantling a gas line at the Bethlehem Steel Plant, outside Buffalo. The plant, shuttered in the early 1980s, fell victim to the nation's declining steel industry.

WITH FUNDS FROM THE BUFFALO AND ERIE COUNTY HISTORICAL SOCIETY, THE HISTORIC AMERICAN ENGINEERING RECORD DOCUMENTED THE SITE AT TIMES RIGHT IN FRONT OF THE WRECKING BALL.

On the southern outskirts of Buffalo, in the suburb of Lackawanna, once stood the Bethlehem Steel Plant, the region's steelmaking king. With funds from the Buffalo and Erie County Historical Society, the Historic American Engineering Record documented the site at times right in front of the wrecking ball.

Started as the Lackawanna Steel Company, the 1,500-acre complex was built in 1902, something of a trendsetter for the steel plants that would materialize around the waters of the Great Lakes. Before then, steel plants had been situated inland in cities such as Scranton, Pennsylvania—where the company previously owned an operation—but officials were lured to western New York by the lakes and the rail lines, which promised ease of shipment for materials raw and finished. As one official noted on the process of steelmaking, “It takes both water and rail facilities and Buffalo has both.”

The complex, designed with transportation as a chief concern, was impressive. A 4,000-foot-long ship canal into the site provided 8,000 feet of dock frontage, with the coke ovens to the west, and the ore yards, blast furnaces, open hearths, rolling mills, and shops to the east. “All the equipment necessary for the various stages of iron and steel production was aligned in a series of parallel rows conforming to the flow of materials through the plant,” notes Leary in *From Fire to Rust*, a chronicle of the plant's rise and fall written with Elizabeth C. Sholes. Ten miles of narrow-gauge track, for use by 32 locomotives, quickly transferred materials. The complex boasted “technology on the cutting edge of early 20th-century engineering,” write the authors. Waste gas was recycled for other operations, saving heat and fuel. “The steelworker of but ten years ago will feel himself lost when he makes a visit to the colossal plant now being constructed,” marveled a Buffalo journalist in 1900. Unfortunately, the company was not good at staying state-of-the-art, which led to decreased productivity and, eventually, demise. By 1922, when Bethlehem Steel acquired the complex for \$60 million, it was “antiquated.” The steel giant poured \$40 million into modernizing and in the years ahead became one of the world's largest steelmaking companies. World War II was particularly lucrative for Bethlehem's operations. The Buffalo plant, employing 20,000 workers, was a backbone of the economy “not just for Lackawanna but the entire surrounding area,” says Michael Malyak, a tally clerk from 1959 to 1967 and now director of the town's Steel Plant Museum.

Working with steel was dangerous, even as technology made equipment safer. In 1969 alone, as *From Fire to Rust* documents, workers made more than 58,000 emergency visits to the local clinic, and labor disputes regarding safety were rife. Business boomed into the 1960s, but—much as with grain—the heyday of steel was on the wane. Bad management, poor business strategies, strikes, and the rise of cheaper imported steel all played into the decline across America. “It was a sign of the times,” says Malyak. “The nations that had been destroyed by World War II were coming back and were able to compete.” Bethlehem Steel was losing in the competition. In 1977, the plant reduced its workforce, setting

off a regional fiscal crisis. After a record loss of \$1.5 billion in 1982, the company closed the Lackawanna plant, a devastating blow “because of the trickle down to all of the mom and pop businesses,” Malyak says.

Saving one of the oldest buildings didn't pan out. On top of the difficulty in preserving such a structure, says Leary, “there's a tendency in industrial preservation to zero in on the physical structures and exclude interpretation. It's like the skeleton of the dinosaur in a museum that just stands there. There's still the question of how it functioned.” Buffalo, he says, allows visitors to “follow several different industrial areas all in one thread.” The city still has its Albert Kahn-designed Pierce Arrow auto factory, an industrial landmark, and the expansion of the transportation museum shows the city hasn't forgotten its roots. The Western New York Railway Historical Society and the Steel Plant Museum will move from cramped quarters in the basement of the Lackawanna library to the soon-to-be Heritage Discovery Center, a circa 1917 power plant renovated for their use.

The city, with unemployment lower than the national average, is optimistic about the future. “We weathered the great recession better than most metros,” Magavern says. While Buffalo isn't growing, its past may prove prologue. On the very land where Bethlehem Steel stood is the recently constructed Steel Winds, one of the world's largest urban wind farms. Eight 400-foot-tall windmills stand at the site, their continuously rotating blades representing the area's hope for a future where it is known as the Buffalo Green Belt, rather than a rust belt. With its industrial infrastructure, close source of hydropower, and plenty of sun and wind, the city could become the nation's renewable energy hub, with projects such as a green development zone on the impoverished west side, where the nonprofit PUSH Buffalo is transforming abandoned homes into sustainable housing, and Honeywell Research Lab's production of a new environmentally friendly air conditioning coolant. The banking industry is thriving while the University at Buffalo, one of the city's four state colleges, has become a world-class research campus, part of a burgeoning “Eds and Meds” economy.

At the center of it all are the gems of greatness, from over a thousand acres of Frederick Law Olmsted-designed parkland to several Frank Lloyd Wrights to a magnificent Art Deco-style City Hall, all part of the tourist draw. But the city's own people may prove the most important ingredient in a revival. Many younger residents have stayed, or have been lured back by the inexpensive cost of living. “A lot of them are very interested in the grassroots projects,” Magavern says. “There's been a real surge of energy and historic preservation is definitely a part of their vision.”

This year's National Preservation Conference features a number of industrial heritage sessions developed by the National Park Service and the National Trust for Historic Preservation as part of a new initiative with the J.M. Kaplan Fund, a major philanthropic entity emphasizing “places and phenomena either too local or too international to be addressed adequately by national governments.”

During the conference, Lowe's photos will be on view at Buffalo's CEPA Gallery.

contact points **web** HAER http://memory.loc.gov/ammem/collections/habs_haer/index.html Erie Canalway National Heritage Corridor www.eriecanalway.org/ Niagara Falls National Heritage Area www.nps.gov/nifa/index.htm Lackawanna Steel Plant Museum <http://steelplmuseum.org/> Partnership for the Public Good www.ppgbuffalo.org/ Industrial Heritage Committee www.buffaloindustrialheritage.com/ Campaign for Greater Buffalo History, Architecture & Culture <http://greaterbuffalo.blogs.com/>

ABOVE: The Bethlehem Steel Plant in the midst of demolition.



THE STEELWORKER OF BUT TEN YEARS AGO WILL FEEL HIMSELF LOST WHEN HE MAKES A VISIT TO THE COLOSSAL PLANT NOW BEING CONSTRUCTED.

—BUFFALO JOURNALIST MARVELLING AT THE COMPLEX IN 1900

ARTI FACT

Passage to Prosperity



WITH ITS REVOLUTIONARY EFFECT on the cross-country delivery of cargo, the Erie Canal was the engineering marvel of its day. But almost from the time of its opening in 1825, there was a problem—it was too small. So began a decades-long expansion. The Schoharie Creek Aqueduct—photographed here arching over the creek as part of documentation done by the Historic American Engineering Record—was erected where the creek met the canal, which during high waters was a turbulent intersection that swept boats downstream. The John Jervis-designed structure, constructed of solid blue limestone, was built between 1839 and 1841, and its 1845 opening was a definite improvement, channeling the canal right over the creek. **TODAY THE STRUCTURE**, located in Fort Hunter, New York—a hamlet along the Erie Canalway National Heritage Corridor—is a site of distinction among the many aqueducts that still exist along the 363-mile-long canal, lonely relics of a bygone era. It is part of the Schoharie Crossing State Historic Site—the only area where all three phases of the canal can be seen at once. Visible from the site is a small section of the original canal including a guard lock built to shield it from the creek's raging waters, and Lock 20, the only original lift lock left. Also in sight are remnants from the enlarged canal including "Yankee Hill" Lock 28 and "Empire" Lock 29, as well as Lock 12 of the still-operating New York State Barge Canal. The aqueduct is also the only section of the original canal designated a national historic landmark. **ABANDONED IN 1915 AND WITH JUST 6** of its original 14 arches remaining, its span now ends only partway across, a picturesque vision of what used to be. But thanks to its stabilization in 2004—with help from a \$365,000 Save America's Treasures grant—what's still there will be around for a very long time, even weathering Hurricane Irene with minimal damage. **VISIT THE HERITAGE CORRIDOR ONLINE AT** www.eriecanalway.org. The archives of the Historic American Engineering Record are on the web at http://memory.loc.gov/ammem/collections/habs_haer/index.html.

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