

# COMMON Ground

PRESERVING OUR NATION'S HERITAGE SPRING 2006



## Mining • majesty

THE SILVER  
LINING OF A  
PROSPECTING  
PAST IN THE  
COLORADO  
ROCKIES

## A Night in a Fort

| BY ISAAC O'CASEY |

*"Sorry for the delay in getting back to you," says Superintendent Chip Jenkins, in the thick of erecting a replica fort at Lewis and Clark National Historical Park, replacing the one that burned last year. Jenkins is juggling "a ton of volunteers," he says—along with satellite trucks and a congressman—before heading out of town in two hours. "About a month after the fort burned I had the opportunity to meet Alec Burpee, a 10-year-old from Vancouver, Washington. He and his best friend organized a penny drive, and got classmates to donate their lunch money, over \$500, to help rebuild the fort." That, and the letter below—from another 10-year-old—speak directly to the power of the places entrusted to the National Park Service. "The best care is in concert with the people who own the park—whether they're neighbors or live across the continent. Channeling their energy and excitement, sometimes you learn something—like when a couple of kids bring you to tears with the consequences of your park."*

**I WAS 10 WHEN I GOT INVITED FOR A SPECIAL NIGHT** at Fort Clatsop by the superintendent. Kids my age spend too much time with their video games pretending about things that never happen. I had to pinch myself because I was pretending right where something really did happen. It was too cool. The night we spent at the fort, a television crew was filming what it would have been like with all the men, a woman, and a baby 200 years earlier. **FIRST, I GOT TO MEET LEWIS AND CLARK!** Then I met Sergeant Ordway and Private John Colter. Then there was Private George Shannon, who was not much older than me. I got to meet their HUGE black Newfoundland dog, Seamen, who slobbered whenever I went over to say hi to him. Yuck. **TO SPEND THE EVENING IN THE CAPTAIN'S QUARTERS** was like a dream. The big stone fireplace warmed the room. The candles made everything seem cozy. (Our class helped make the candles during a field trip.) Then it was bedtime. We slept in the enlisted men's quarters. The bunks were rickety cedar, made with axes and draw knives. We slept on slabs of cedar planks. The mattresses were bearskin. The covers included elk and deerskins. I am glad they did not use porcupine skins for blankets. I got the top bunk and my brother slept on the bottom. You could hear the wind up in the Sitka Spruce that night. The wind would knock the small pinecones onto the roof above my head. Every time I fell asleep, kerplunk, kerplunk. I had to go outside once to the bathroom. The stars were sooo cool. In the middle of the night was the sound of a barred owl.

You could hear the change of the guard out in the parade grounds. I was glad I was wrapped up and warm inside. Poor Sergeant Gass. My dad told me not to talk in my sleep because the local newspaper reporter was sleeping in the other bunk. I wonder if the reporter could interpret my dad's snoring. It was loud. **THE NIGHT IN THE FORT MADE THE PARK MORE REAL** to me. My dad, brother, and I worked all summer helping to build the trail from the fort to the sea. It was really neat because we get so much rain here, some of the woods are really thick. The trail dropped over the edge and into the trees. It goes by streams with these neat little eels and past a small lake with cut-throat trout and next to a beaver pond. Helicopters lowered all the wood for the bridges and boardwalks. Then we would carry them from the drop zone to where the workers were building. **THE BEST PART IS I GET TO LIVE** right next door to a national park!

**// You could hear the wind up in the Sitka Spruce that night. The wind would knock the small pinecones onto the roof above my head. Every time I fell asleep, kerplunk, kerplunk. //**

*Millions of kids visit the parks every year, and every experience can be meaningful. Introducing our children to the legacies of the land is a high calling, for parents and for those of us fortunate enough to help care for the places where these legacies live on. Kids love history that's real, history they can see, touch, and even talk to, like Sergeant Ordway. And the authentic is not only in the national parks, it's in communities across the country—in places of preservation, places of learning, and places of inspiration. This National Park Week, April 22-30, take its theme—"Connecting Our Children to America's National Parks"—to heart. For inspiration, read more letters from kids at [Common Ground online](#).*



PAUL DOLKOS

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### Mining Majesty: Seeking the Silver Lining in a Prospecting Past

Tucked away in Colorado's San Juan Mountains is a rare relic of a watershed in mining history.

**BY JOE FLANAGAN**

**Cover:** Looking down on the Shenandoah-Dives Mill, seen from the Silver Lakes Basin of Colorado's San Juan Mountains.

JET LOWE/NPS/HAER

# QUEST FOR AUTHENTICITY

## NATIONAL PARK SEARCHES FOR THE ESSENCE OF LEWIS AND CLARK

Historians have long suspected that the reconstructed Fort Clatsop, Lewis and Clark's camp in the winter of 1805-06, was not in the same spot as the original. The hastily erected enclosure was occupied for a little more than three months before the weather turned and the expedition headed back east. It sat moldering until the 1850s, when it was torched by pioneers to make way for crops.

The replica, built in 1955, was based on the recollections of early homesteaders. The park's main attraction, last fall it too burned to the ground. The fire created a chance to clarify the historical record which, though well documented in journals, is very sparse in the way of physical evidence. Archeologists now had an opportunity to determine the original's exact location.

Evidence of the expedition is famously elusive. Archeologists have turned up few signs along the route. This was the first chance in 50 years to excavate one of the most important sites.

In the three-week project, investigators used a magnetometer and ground-penetrating radar, turning up signs of the long Native American presence before Lewis and Clark and the settlers who came afterward. Though nothing could be definitively linked to the travelers, the findings add to the archeological record from earlier excavations, including musket balls and glass beads used in trading.

And not far away, Station Camp, where the expedition first arrived, is being set aside as a unit of Lewis and Clark National Historical Park. As the state spends \$5.5 million to reroute a highway away from the site, National Park Service archeologists have uncovered tens of thousands of artifacts from the early fur trade,



The area was a very busy place, which surely muddled the archeological record. According to park superintendent Chip Jenkins, the fort was an attraction as early as 1811. People traveled considerable distances to see where the expedition spent the winter. In the 1840s, the first wave of settlers cleared the land for farming. Later, there was a clay mine in the area, and a steamboat landing as well.

Still, though disagreement remains on the fort's location, many agree that the replica was in close proximity to the original. And given what's been learned over the last decades, the new one, now being constructed, will be a much closer match. The 1955 version was built by skilled craftsmen who took a great deal of pride in the quality of their work. But their flush-cut log ends and tight notches were almost certainly not what the Lewis and Clark expedition produced. Exhausted, perpetually wet, and eager to get a roof over their heads, the men were not particular about quality. "We know they threw up the walls in three weeks," says Jenkins. "They were living under rotting elk hides. They had no tents at that point."

As a result, the new version will be more rustic. Now being built at an indoor arena at the Clatsop County fairgrounds, it will have the appearance of having been hewn with the types of tools the explorers used. While the 1955 replica was based on a floor plan sketched by William Clark, other journals have surfaced by members with more of a hand in the actual construction. These descriptions have informed the design.

some which likely pre-date Lewis and Clark. For more information, contact Superintendent Chip Jenkins, [chip\\_jenkins@nps.gov](mailto:chip_jenkins@nps.gov), or visit the park online at [www.nps.gov/lewi](http://www.nps.gov/lewi).

**Left to right: Working on the new fort; the first replica before the fire; eyeing evidence; staffers setting up an archeological grid; the first replica.**

LEFT TO RIGHT DAILY ASTORIAN, STEVE RINGMAN, SEATTLE TIMES, AP, DAILY ASTORIAN, DAMITA DELIMONT STOCK PHOTOGRAPHY



# IN THE NAME OF LAZARUS

DOCUMENTING THE ARTIFACT OF AN EARLY EPIDEMIC

It was unusually hot and dry in Philadelphia the summer of 1793. Creeks and rivers were low, and mosquitoes bred in great numbers. The docks were also crowded with refugees from political turmoil in the Caribbean, and some had Yellow Fever. The disease, spread liberally by the mosquitoes, became an epidemic in no time, its symptoms horrific. Philadelphia emptied out as the death toll rose. Accounts of the period read like apocalyptic science fiction.



**Far left:** HABS architectural historians Jamie Jacobs and Catherine LaVoie documenting the quarantine station. **Near left:** The cupola offered a vantage point to see ships with immigrants approaching.

**THE LAZARETTO, AN ITALIAN WORD DERIVING FROM LAZARUS, THE PATRON SAINT OF LEPERS, IS THE OLDEST STRUCTURE OF ITS KIND IN THE UNITED STATES AND THE ONLY ONE STILL STANDING, A RARE ARTIFACT OF THE HISTORY OF PUBLIC HEALTH POLICY.**

This summer, a team from the Historic American Buildings Survey, National Park Service, arrived at a rambling brick structure on the Delaware River. Their objective was to document the 200-year-old quarantine facility that was the direct result of Philadelphia's traumatic experience. The Lazaretto, an Italian word deriving from Lazarus, the patron saint of lepers, is the oldest structure of its kind in the United States and the only one still standing, a rare artifact of the history of public health policy.

**BUILT IN 1799, IT WAS THE FIRST STOP FOR IMMIGRANTS COMING TO Philadelphia.** The Lazaretto operated for over 90 years, and today is considered one of Pennsylvania's most significant, and endangered, historic sites. "This was a physical representation of the new health law," says Jamie Jacobs, a HABS architectural historian. "Every ship that came up the Delaware had to stop there. There was not an Ellis Island, there was no real immigration service at the time." Unused and in a state of limbo for years, the site was to become a parking lot but last August it was purchased by Tinicum Township for \$3.1 million, and rescued from demolition.

The building was listed in the National Register of Historic Places in 1972. The HABS team, consisting of a photographer and a pair of architectural historians, is creating a record that would aid its candidacy as a national historic landmark. In any event, the research and documentation will become part of a thorough permanent record that did not exist before. The project was conducted as part of a HABS endangered buildings program. The Northeast Region of the National Park Service, whose jurisdiction includes Pennsylvania, lent its support.

**THE EPIDEMIC OF 1793 DID NOT END UNTIL NOVEMBER BROUGHT COLD weather and an end to the mosquitoes.** Shortly thereafter, Philadelphia formed the nation's very first board of health, taking the lead in establishing a system to control infectious diseases. There was no federal role in maintaining health standards, considered the responsibility of state and local government. American cities of the time had neither the means nor the knowledge to main-

**Right:** Ironwork on the gates. The architect borrowed details from English country houses.





LEFT AND NEAR RIGHT JAMES ROSENTHAL/INFS/HABS



**Left: An empty stairway in the once-crowded quarantine station.**

tain proper sanitation, so the only defense was quarantine. At about this time, municipalities created some of the first sanitation regulations, an attempt at behavior modification intended to change the public’s approach to hygiene. Quarantine on a large scale was seen only in the bigger port cities like Philadelphia, Boston, and New York, where human traffic and the potential for disease were high.

**THE LAZARETTO WAS BUILT ON A MARSHY ISLAND. FROM A CUPOLA AT THE** top of the 30-room Georgian structure, a lookout could see ships as they came up the Delaware River. The lookout rang a bell to alert the physician and the quarantine master, who boarded arriving vessels to examine passengers for disease. The sick were offloaded and stayed until they recuperated or, in some cases, died. Potentially contaminated cargo was offloaded too.

The building was 10 miles downriver from the city, far enough to be considered safe. It replaced an older facility—a “pest house,” in the vernacular of the time—that was too close for comfort. According to Jacobs, the building’s design borrowed from trends in hospital design in England. The style of public institutional buildings followed what he calls a “domestic typology.” In his report on the Lazaretto, he quotes *The Hospital: A Social and Architectural History*: “Noble and bourgeois donors built for the sick poor in forms familiar to themselves that were so closely

It wasn’t until the end of the 19th century that the Federal Government got involved in health issues, brought about by the massive influx of immigrants. More than 90 years after the Lazaretto opened its doors, the first permanent federal immigration and quarantine station opened at Ellis Island.

The Lazaretto closed in 1895, when a new federal facility opened a few miles downriver in Marcus Hook, designed for handling immigrants on a large scale. During WWI, the building’s location on the Delaware made it an ideal base for seaplanes, and equipment from this era remains at the site.

**ACQUIRING THE LAZARETTO TOOK AN INITIATIVE BY THE COUNTY, WHICH** found support in the state legislature for a grant to help purchase the property. Tincum County plans to build a new firehouse and evacuation center nearby, a move that gives some preservationists cause for concern, since it is not just the building itself that is considered important, but the entire 10 acres associated with it. It is assumed that many immigrants did not leave the Lazaretto alive. Where they were buried seems to be an open question, but the answer may come to the fore when the firehouse construction starts. The Pennsylvania Historical and Museum Commission has approved a \$50,000 survey of the site.

Plans for the building’s preservation are on hold, but the HABS documentation could be used as blueprints for a rehabilitation.



**Far left: Water damage inside. Center: The doors to an outbuilding. Near left: A decorative touch at the entrance.**

**THE BUILDING WAS 10 MILES DOWNRIVER FROM THE CITY, FAR ENOUGH TO BE CONSIDERED SAFE. IT REPLACED AN OLDER FACILITY—A “PEST HOUSE,” IN THE VERNACULAR OF THE TIME—THAT WAS TOO CLOSE FOR COMFORT.**

derived from palaces or country houses, it is hard to distinguish a hospital from a gentleman’s home.”

The central feature is the entrance and administrative section, “a Georgian house on steroids,” HABS architectural historian Catherine LaVoie calls it. On either side are identical wings, one for women and one for men, each with a long veranda that served as a common space. A number of outbuildings have long since vanished, but there remain a kitchen, a bargeman’s house, a physician’s house, and a pair of sheds.

However, the first order of business is a study of what’s possible. Suggestions range from a simple public historic site to a living history museum with costumed role players, interactive displays, and genealogical resources. The township is making sure the structure is stable and watertight while plans are developed.

For more information, contact Bill Bolger, manager of the NPS Northeast Region’s national historic landmarks program, [bill\\_bolger@nps.gov](mailto:bill_bolger@nps.gov) or Jamie Jacobs, [james\\_jacobs@nps.gov](mailto:james_jacobs@nps.gov).

# AMERICAN PASTORAL

WEB EXHIBIT REVISITS THE ROOTS OF THE CONSERVATION MOVEMENT

The landscapes are luminous and forbidding, epic in scope and heavy with portent. Painted at the dawn of the Industrial Age, they are an elegy to a lost Eden. The Vermont mansion where they are displayed was home to a host of thinkers and benefactors—the pioneers of conservation—people with means who had come to love nature and were instrumental in its defense.



**MANY OF THE WORKS—BY SOME OF THE 19TH CENTURY’S FINEST LANDSCAPE PAINTERS—SERVE AS A COMMENTARY ON THE THINKING OF THE TIME.** THEY RECAST NATURE AS A SPIRITUAL TEXT, AS A MEDITATION ON OUR PLACE IN THE WORLD, IDEAS THAT ARE PARTICULARLY PRESCIENT TODAY.

Vermont’s Marsh-Billings-Rockefeller National Historical Park commemorates the birth of American environmentalism. It also serves as an education center for land stewardship. Its paintings are the focus of a new online exhibit produced with the Museum Management Program of the National Park Service.

Many of the works—by some of the 19th century’s finest landscape painters—serve as a commentary on the thinking of the time. They recast nature as a spiritual text, as a meditation on our place in the world, ideas that are particularly prescient today.

**THE PARK WAS ESTABLISHED IN 1992, WHEN THE ROCKEFELLER FAMILY** donated the 550-acre estate to the American people. While the exhibit’s main feature is the paintings, it also offers a history of the succession of wealthy conservationists who lived here.

Built in 1807, the mansion was the boyhood home of George Perkins Marsh, an energetic and multi-talented man whom the exhibit calls a “a key figure” in the intellectual ferment of the mid-1800s. His father instilled a love of nature on rides through

the countryside in a two-wheeled wagon. The young Marsh took to roaming the woods around the big Federal-style house, soon realizing that the world his father loved was quickly changing. Mount Tom, which rose up behind the mansion, was being denuded by logging and grazing. With a perception rare for the time, he saw a chain reaction: erosion washed away the topsoil, which in turn silted up the waterways, destroyed fish habitats, and rendered fields infertile. His vision of nature as an interconnected web stayed with him for the rest of his life.

**MARSH STUDIED LAW, GOING ON TO BECOME A U.S. CONGRESSMAN AND** one of the founders of the Smithsonian. Every time he returned home, he was shocked by the abuse being wrought on the land. He spoke out, warning farmers of the consequences and advocating

**Above from left: Conservation pioneer Frederick Billings; a study of Lake George in the Adirondacks; the mansion in Woodstock. Right: Yosemite in 1870, by landscape painter Alfred Bierstadt.**



**BILLINGS WAS CAPTIVATED BY THE WEST'S DRAMATIC LANDSCAPES, AND TROUBLED BY WHAT THE GOLD RUSH HAD DONE. HE WAS AMONG THE FIRST TO SUGGEST THE IDEA OF NATIONAL PARKS, RECOMMENDING THE PRESERVATION OF PLACES LIKE YOSEMITE, THE UPPER VALLEY OF THE YELLOWSTONE RIVER, AND WHAT WOULD LATER BECOME GLACIER AND MOUNT RAINIER NATIONAL PARKS.**





for the more responsible agriculture practiced in Europe. His book, *Man and Nature*, published in 1864, was seminal. He questioned what the destruction of nature would do to the climate. The book was a revelation. But with a country in the throes of expansion, Marsh's voice was stilled. Appointed ambassador to Turkey, then Italy, he spent most of his time in Europe. His family sold the house in 1869.

**THE NEW OWNER, FREDERICK BILLINGS, HAD GROWN UP WITHIN SIGHT OF THE** estate. He'd made a fortune as a lawyer and real estate developer during the Gold Rush in California. A fellow conservationist, he admired Marsh.

Billings was captivated by the West's dramatic landscapes, and troubled by what the Gold Rush had done. He was among the first to suggest the idea of national parks, recommending the preservation of

places like Yosemite, the upper valley of the Yellowstone River, and what would later become Glacier and Mount Rainier National Parks. In later life, as head of the transcontinental Northern Pacific Railroad—which opened the West further still—Billings advocated natural wonders as tourist attractions. He promoted the land as valuable in and of itself.



**Above: Julia Parmly Billings, circa 1865. She was as much an environmental advocate as her husband.**

He resolved to restore the countryside he knew as a boy. Buying the estate and reforesting Mt. Tom's slopes, he began to explore better ways of farming.

Billings' marriage to Julia Parmly, a New Yorker, established a connection to the art

world. Their home on Madison Avenue was decorated with works by some of the era's most highly regarded artists. As their collection expanded, the Woodstock house became a private gallery, celebrating the theme of untrammelled nature.

By the time of Billings' death in 1890, the estate's forests and dairy farm were renowned as the epitome of progressive land management. The farm won awards at the 1893 World's Fair in Chicago.

Billings' granddaughter, Mary French, inherited the property in 1951. She and her husband, Laurance S. Rockefeller, continued the tradition, operating the farm as a model for sensitive land management while furthering the cause of conservation. The Rockefeller

family, a major supporter of preserving open space, figured prominently in the origins of the National Park System. Laurance, an advocate of making nature accessible to the public, was inspired by his father, John D. Rockefeller, Jr., who had been instrumental in setting aside wilderness that would become national parks at Great Smoky Mountains, Shenandoah, Grand Tetons, and Redwood.

**THE HUDSON RIVER SCHOOL HAD ITS OWN CONNECTION TO THE EARLY** conservation movement. Thomas Cole, Asher Durand, Frederick Church, and others celebrated nature's beauty, its power to inspire, its role as an antidote to an increasingly urbanized world. Their pristine natural scenes broke with the portraits and renditions of historical events that had long been the convention.

The group's name derived from its members' habit—at least in the early days—of exploring the Hudson River Valley for subjects. They helped invest the outdoors with a transcendent quality, while writers such as Nathaniel Hawthorne, Ralph Waldo Emerson, and Henry David Thoreau were doing the same in literature. Conservation was a hot issue, and the paintings gave it a visual identity. Collectors sought them out. As the century progressed, artists expanded the scope of the Hudson River School to produce monumental western landscapes.

Frederick and Julia Billings visited many of the scenes depicted in the paintings, their great fondness for the West reflected in inspiring images of Yosemite Valley, Mount Hood, and the coastal cliffs around San Francisco. Says curator Janet Houghton, "The collection gets its evocative power from the fact that it's part of the house's furnishings . . . it reflects the Billings' view of the natural world." It also let them bring the outdoors inside.

In the social geography of the Victorian era, the monied classes mingled with the art world. "It's another truism about the 19th century," Houghton says, "that people of means tended to know the artists and had visited their studios in New York. This is true of the Billings."

**THE EXHIBIT OFFERS BIOGRAPHIES OF MARSH, BILLINGS, AND THE** Rockefellers, as well as a description of the Hudson River School. The paintings are divided into landscapes of America and Europe, as well as "exotic views" of the Middle East. A timeline on the park's website further illuminates the exhibit's chronicling of "the intense intellectual ferment of the era," encompassing the suffrage movement, abolitionism, and the emergence of the nature essay as a literary genre. The images, all displayed as thumbnails, can be enlarged with a mouse click.



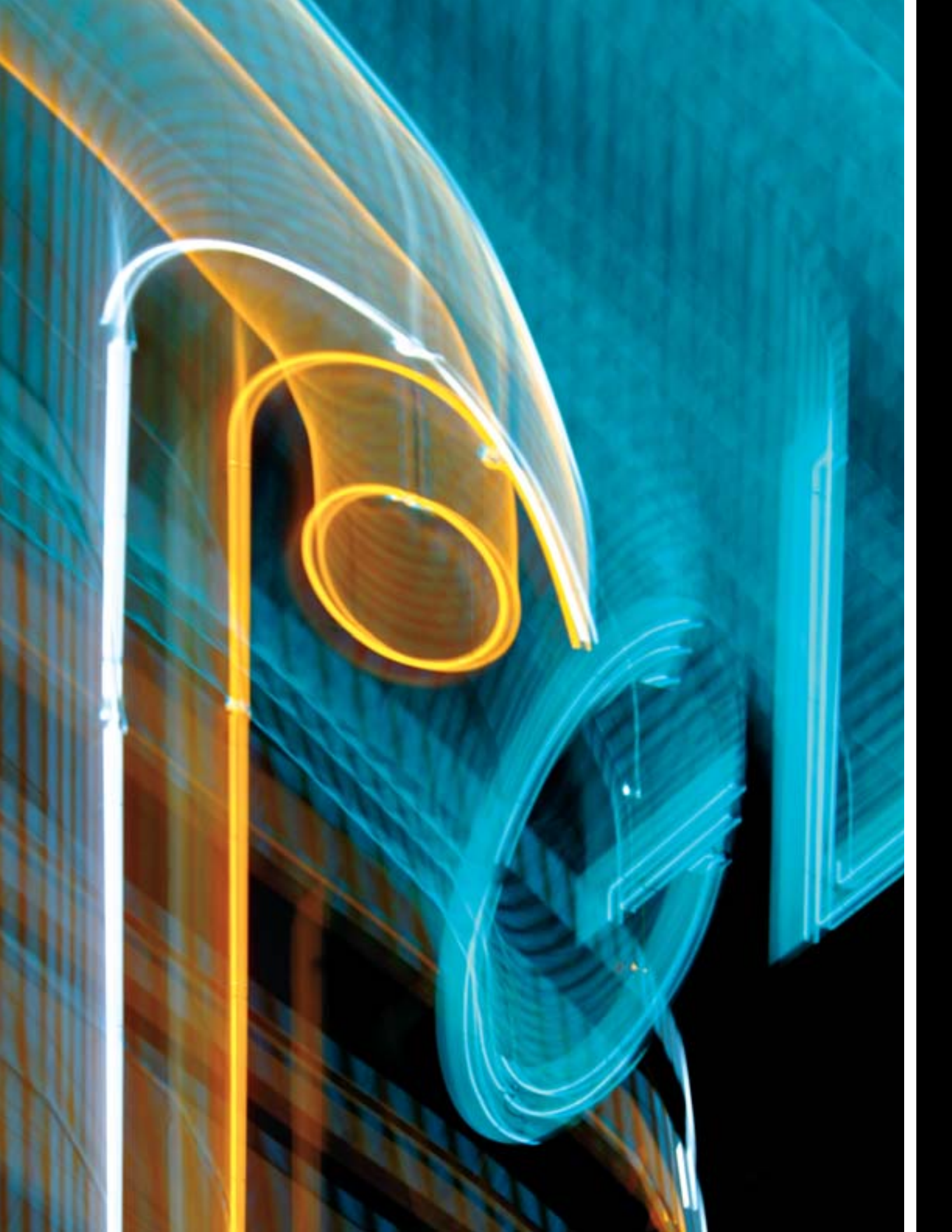
Today, Marsh-Billings-Rockefeller National Historical Park maintains the vision of the pioneers of conservation. Beyond commemorating the history of land stewardship, it works toward promoting strategies to balance care of the environment with the realities of the modern world. The park is also home to the

**FREDERICK AND JULIA BILLINGS VISITED MANY OF THE SCENES DEPICTED IN THE PAINTINGS, THEIR GREAT FONDNESS FOR THE WEST REFLECTED IN INSPIRING IMAGES OF YOSEMITE VALLEY, MOUNT HOOD, AND THE COASTAL CLIFFS AROUND SAN FRANCISCO.**



Conservation Study Institute, established by the National Park Service to achieve these goals. A partnership with academic, government, and nonprofit organizations, the institute provides a forum for exploring contemporary issues, new techniques, and the future of American conservation.

The exhibit is online at [www.cr.nps.gov/museum/exhibits/mabi](http://www.cr.nps.gov/museum/exhibits/mabi). For more information on the exhibit or Marsh-Billings-Rockefeller National Historical Park, contact Janet Houghton, (802) 457-3368, ext. 12, [janet\\_houghton@nps.gov](mailto:janet_houghton@nps.gov), or visit the park web site at [www.nps.gov/mabi](http://www.nps.gov/mabi).







# POOL

## O F M E M O R I E S

PROBING THE RECENT PAST AT MARYLAND'S GLEN ECHO PARK WRITTEN AND PHOTOGRAPHED BY DAVID ANDREWS

**“Sorry kid, can’t let you in,” the counselor said, fixing his glance on the fresh scar over my eye,** still evident today under a graying brow. This wintry morning, one scarred facade stares down another as I point a lens at the pool’s flaking entrance, and it points right back. Memories rush up from the deep, summoned by the moment. ¶ I served out my boyhood where Washington’s East Capitol Street—a leafy byway at the root—blossomed into a brutal swath of concrete sprawl, arrested at the border by trees and tin-roof relics like ours. One side was black, the other white, and trespass rare—a jolt after living in one of the city’s few integrated neighborhoods. ¶ The nation was going from a decade that denied differences to one that embraced them. For a Catholic schoolboy, duded up in starched shirt and monogrammed tie, getting around was often an exercise in eluding the local punks. One day I failed the exercise, and the counselor, taking measure of the evidence, quashed my dream of a day in the Crystal Pool.

**Left, above: The park’s entrance, ablaze in neon, framing the front of the pool. “A rapidly whizzing trolley-car can stir a breeze in the stillest night of midsummer,” wrote one author about the mechanized thrills and fantasies sprouting around cities of the early 20th century. “The need for some place where one could alight and thus vary the monotony led to the inception of the park scheme.”**

ALL PHOTOS DAVID ANDREWS/ENPS EXCEPT AS NOTED



**IT WAS THE GREEK GOD OF SWIMMING VENUES, THE LOVE CHILD OF** Hercules and Aphrodite swaddled in Art Deco grandeur. There was a quarter-acre beach, a reviewing stand, two low boards, one high, a fountain, an island, and not one but three pools, where thousands of water worshippers could lap up the day, and often did. The exclamation point was a sky-high slide. As evening descended along the Potomac, the place became a Busby Berkeley tableau, alight with underwater incandescence. “It could be separated from Glen Echo park and still be magnificent,” one visitor recalls in the film that airs at the site.

As the other campers jostled by me, through the turnstiles, past the maze of plumbing, past the ice-cold water jets, and on to gulp down a day of pleasure, I could smell the chlorine and the sun-tan oil, hear the glee refracted by the sapphire surface float up over the park and into the glorious oak canopy. I did find a substitute for the fun in the sun, growing intoxicated with triple helpings of the Tilt-a-Whirl, the Satellite Jet, the Hall of Mirrors, and some of the premier amusements on the planet. On this frosty winter morning, with the wind whipping from across the Potomac, the moment still hangs in the air.

My grandparents take the rap, getting me into Catholic school and camp. Summering with clergy was not my idea of a good time; the hook was the field trip. Today, I stand next to the lifeguard station, perched high above the Potomac. The pool is filled in, weeds crawling up the walls. Most of the rides are history. But the outline survives, and so does the magic. The park sits on a high plateau, a gentle pause where the river meets the Blue Ridge foothills. Below, cascading whitecaps rush toward the city. “The real story was not just what to do with the 16 acres here,” says Sam Swersky, a National Park Service ranger who gives me a tour-de-force tour. “The story goes back even earlier to what to do with the Potomac. There were serious proposals to pave over the C & O Canal, make it a connecting road to the interstate.” The environmental movement came to the fore around the same time that Glen Echo hit the skids. “The amusement parks, on the outskirts of

cities, became prime real estate,” Sam says. “So where you had declining profits in amusements, you had soaring opportunities in apartments and shopping centers and housing tracts. At the same time, lakes and rivers were being described as dead in the media. The fear was that if something wasn’t done, you’d have a cesspool flowing by the Washington Monument.” The locals didn’t want apartments crawling up the hills, either. They found a sympathetic ear in Secretary of the Interior Stewart Udall, and the park owners agreed to swap with GSA for a downtown site. In a month, the citizens raised



RICHARD A. COOK COLLECTION



LIBRARY OF CONGRESS

**Left: All that's left of the Cuddle Up is its streamline skeleton, an essay in Art Deco. Above: Earth Day and hedonism head to head—swell swimming flanks a “yurt,” inspired by the movable abodes of Mongolian nomads, made of animal skins and carpets. The structure and its siblings—intended for the Mall in the early '70s at an expo called “Humanisphere”—found a home at the park when the event fell through. Today they host art classes.**

\$80,000, reeling back the purchase of the carousel from a California collector. From there, the place evolved into a national park, melding the past with puppet shows and art exhibits and ballroom dances and more, the carousel restored to its original magnificence. But perhaps the prime use is less tangible. “People come to me to check their memories,” says Sam. “As you grow up, the concerns of the world lay on you. People yearn for a time when they were with family or friends. What’s left is the place, etched in their minds. They might not remember years of work, but they’ll remember one afternoon.”



**THE PLACE OZZED ROMANCE, RIGHT FROM THE GET-GO. GLEN ECHO STARTED** as a retreat for the Chautauqua movement, which aimed to spread culture from the well-to-do to the masses. There were prayer vigils and lawn tennis, songs and storytelling. Sunday was set aside for religious observance. There were also campfires sure to ignite the unapproved spark, and twisty-turny paths ideal for a rendezvous, lit by small colored lights with cedar signs extolling nature's beauty. The Chautauqua chancellor imposed a curfew, but it met with small success, his own daughter a reported multiple violator.

The 1920s brought the vote and social freedom for women, both sexes done to the nines in pictures from the period. Questing for a kewpie doll, a sheer-sleeved flapper hoists a .22. The park was a swinging hot spot, with a Tunnel of Love and the new coast-to-coast craze, the Caterpillar.

"Here was the little car, barely wide enough for two," Sam says. "You have to be pretty friendly with someone just to get in. Then it takes off, undulating round and round until it hits peak velocity. A canvas cover descends over you and your sweetheart, and you're careening at breakneck speed, pushed next to each other, *in the dark*. This is an era when couples not only dressed formally, they acted formally, regardless of their emotions. You have to believe we haven't changed much in 80 years. The park gave you a little license to do what's natural!"

Flash forward three decades and it's lights, camera, libido on the Milt Grant Dance Show, live from Glen Echo Amusement Park. Pompadoured or page-boyed, stag or drag, you came to gyrate. One

**Right, below: Images of the carousel flank a 1960 faceoff—** a Glen Echo guard and Howard University med student Marvous Saunders. Lawrence Henry, a divinity student at the school, led the drive to desegregate. "Can I ask your race?" a guard asked him. "I belong to the human race," he replied. Two months of protests—with George Lincoln Rockwell's Nazi Party turning out to back the park—forced integration. "The racial ugliness that surrounded the desegregation really took away a lot of the fantasies," a former lifeguard recalls in the film that airs at the site. "I saw people that I know cheer when George Lincoln Rockwell showed up. That was really hard for me to understand." At a reunion of picketers last year, Tina Clarke—then a teenager protesting with a contingent from the NAACP—said her cheek still feels the sting of a heckler's spit. For others, it was too painful to return.



UNDERNEWS/PROGRESSIVE REVIEW

performer's swimsuit went opaque as she emerged lip-syncing from the pool, to the delight of cameramen. "The park set the stage for a memorable experience, creating a desire to come back," Sam says.

It all started with the streetcar. "The ride was as much fun as the park—until you got to the park," a visitor recalls in the film.

Drivers went pedal to the metal as soon as they hit a private right of way outside Georgetown, whizzing through an instant countryside of horses and geese and pigs and sheep, a fairy tale of chasm-leaping trestles along a wooded shelf precipitously peering down on the river.

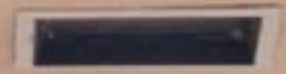
The trolley company—proprietor of the park—is the key to the history. "Admission was free, but you were already a customer when you hopped on the car," Sam says. "It was a national phenomenon. From coast to coast, north to south, east to west, every city had a park. The proof is on eBay. Plug in 'amusement park' and 'postcard.' Every day you'll get 200 to 400 hits."

It was a paragon of pleasure, just a streetcar ride away. Smiling girls and sailors, lashing a wooden horse. A metal lady, laughing maniacally. Sno-cone bombardiers, joysticking a flying scooter. Quadruple dips of danger, hair slicked into a Fonzi.

"At the top of the big drop, the macho-type guys would always want to show off," one visitor says in the park film. "So they would stand up as the thing was in descent. I always thought it was like putting your life on the line." Glen Echo saw its first fatality in 1918.

When brazen patrons took the fall, a park could be damaged by publicity or done in by legal settlement. Still, there was no stopping the headlong rush for faster and scarier—cars that zigzagged or switch-





backed, cars that jumped gaps, cars that raced. New rides replaced them as fast as they were built. Coasters got higher climbs, deeper dips, with names like Cyclone Racer, Tornado, Mr. Twister, and Shooting Star. Chicago's Riverview Park boasted seven of them. The coaster became the billboard, the outward sign of a new visual signature. Willard Scott—weatherman for the *Today Show* and a native Washingtonian—recalls in the park film: “As a kid I used to go over to the corner store, eat 25 Twinkies and gulp two big 16 ounce RC Colas, then ride the coaster. You can imagine what happened after the third or fourth trip.”

Sam says, “You put in a new coaster, it paid for itself in a couple years, then ran for decades at a profit. There was no scrimping. You got the best you can get.” At Glen Echo, the carousel animals were hand carved out of wood, the mirror frames—a delicacy in plaster—all molded, gilded, and painted by hand. “They did that to make an impression on you,” Sam says. “And it worked.”

The 1920s were the golden years, but most parks went under with the Depression. Glen Echo's heyday followed the fortunes of the city, whose population exploded with the New Deal and WW II. Patrons wanted rides they could control, like gas-powered motorboats and the Flying Scooter, whose hinged rudder let riders “dive” towards the ground, an amusement park first.

A million people came through the turnstiles in 1942. By 1953, attendance was so high ticket sales had to be centralized. Workweeks were shorter, weekends longer. “Glen Echo was *the* social spot to be,” Sam says. “If you were white.”

**Opposite, below left and center: The popcorn palace recalls the elixir of a summer day—frothy cones of cotton candy, hot dogs and soda held aloft on the coaster, and the metallic blare of the carousel, mirrored lower left. The restoration of the park's signage, a superb sampling of Moderne style, arose when the starstruck instructor of a neon workshop, attended by a ranger wanting to repair a letter, helped get local companies to donate \$30,000 in materials and labor. Below right: Stewardesses hold on to their hats.**

clubbed, kicked, chained, and high-pressure hosed, all on TV. At Glen Echo, a Howard University divinity student saw the chance to break the back of segregation in the largely white county. So commenced two months of picketing—bolstered by the nearby residents of Bannockburn, a predominately Jewish community. Attendance took a hit, and finally the park's hard-line managers gave in.

“A lot of racial tension remained,” Sam says. A host of private swim clubs sprouted up in the area; a park riot, in 1966, signaled the end. “One of the main causes was the way the African American customers felt they were treated—they weren't going to stand for it,” says Sam. “That turned the park into a ghost town.”



RICHARD A. COOK COLLECTION

**ONE SUMMER MORNING IN 1963, PARABLE AND PROPHECY**—THE CIVIL RIGHTS anthem “Blowin’ in the Wind”—floated out of my counselor’s car radio and into the backseat, interrupting my reverie. It was the end of childhood, the end of an era. A new catechism promised change. The priests and the nuns, essence of uncool, became heroes overnight, marching on the Mall with Martin Luther King, Jr.

The country was pressure-cooked out of a somnolent decade. All through the South, freedom riders stood up—and were promptly

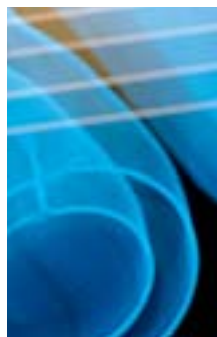
**LAST SPRING, PLACES OF PLAY AS PLACES OF MEMORY GOT THE SPOTLIGHT** AT a conference cosponsored by the National Park Service. “I wasn’t aware of all the places that people take for granted—until they become landmarks,” says Andy Quinn, an attendee whose family still runs Pittsburgh’s century-old Kennywood Amusement Park, itself a national historic landmark. “And tearing them down doesn’t mean something better is going up.” Says Sam Swersky, “When Glen Echo was acquired in 1970, the idea of appreciating places like this wasn’t even on the radar

screen. Today, when you enter the ballroom, you enter another era. You're an active participant in what was important 80 years ago." During the 1990s, the dancers themselves—some of whom met their spouses here—rose to oppose the demolition of the structure, then being held together with band-aids. County executive Doug Duncan helped deliver \$20 million in county, state, and federal rehab funds. Today—on the same floor lit up by Tommy Dorsey and Bill Haley & the Comets—700 people come to Jitterbug and Lindy Hop.

Kennywood is giving it a go too, Andy says. "A lot of our rides are the one or two left. If you wanted to buy them now, you couldn't. They still appeal because generations have taken their kids on them. Outside our area we're viewed as a cool, old time park, which has a marketability in this cookie-cutter age. Ohio law says school field trips have to be educational. What better way to learn than to go to a national historic landmark." After a PBS documentary aired, he says, "people called from places like Los Angeles and Chicago saying your park reminds me of the one from my childhood. When we expanded, we copied the rides of 1900 to 1910 from old photographs."

Playland, an Art Deco delight on the shores of Long Island Sound, has "an astonishing level of integrity"—says Lisa Kolakowsky, a

For more information, contact Sam Swersky, Glen Echo Park, 7300 MacArthur Boulevard, Glen Echo, MD 20812, [sam\\_swersky@nps.gov](mailto:sam_swersky@nps.gov), [www.nps.gov/glec](http://www.nps.gov/glec). A lesson plan for teachers, developed by the National Register of Historic Places, is online at [www.cr.nps.gov/nr/twhp/wwwlps/lessons/24glenecho/24glenecho.htm](http://www.cr.nps.gov/nr/twhp/wwwlps/lessons/24glenecho/24glenecho.htm). Special thanks to Sam for his insightful assistance with the article, and to Arianne Burtaine of the Glen Echo Park Partnership for Arts & Culture for her invaluable help. Also thanks to Richard Cook for use of the images from *Glen Echo Park: A Story of Survival*.



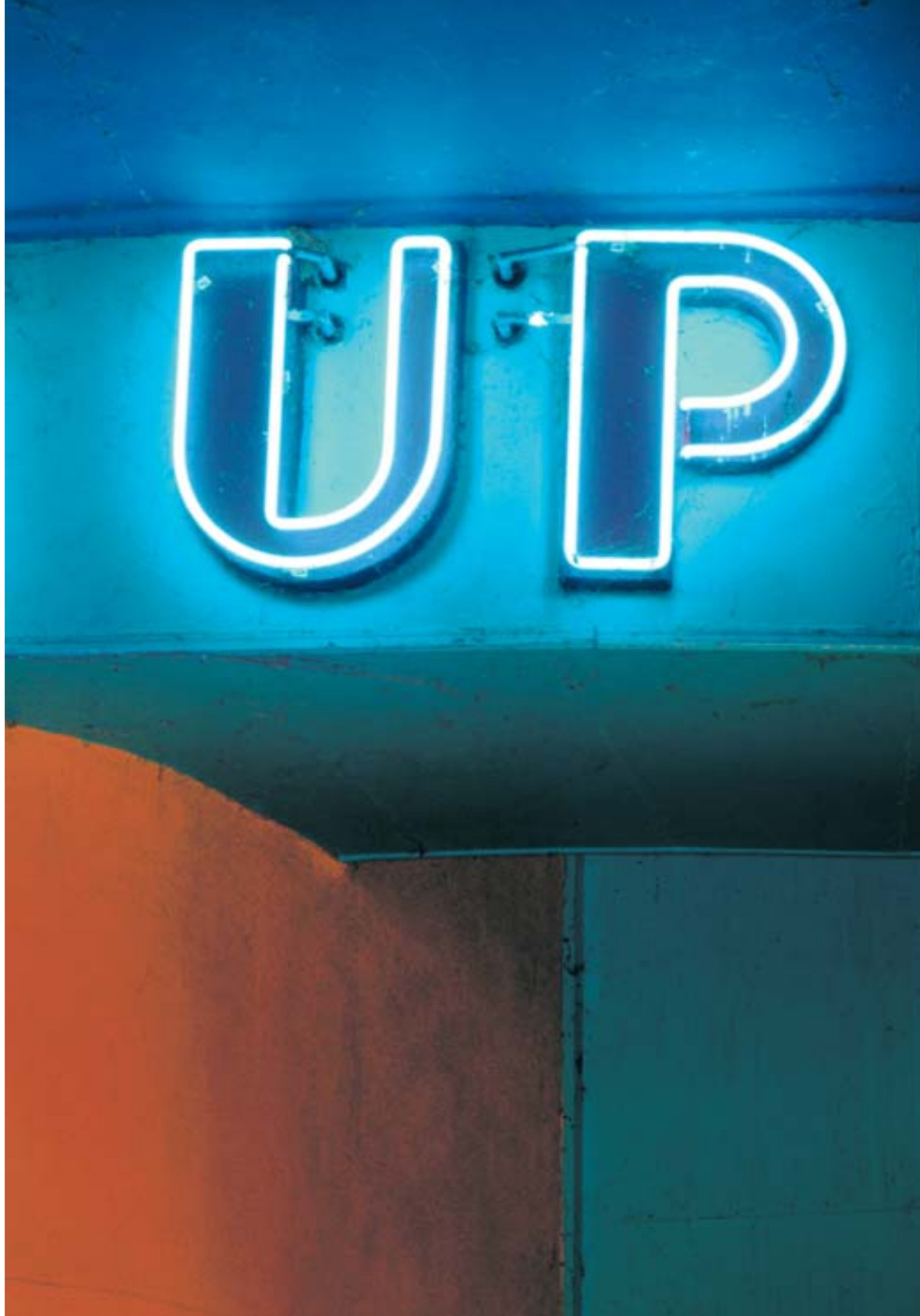
National Park Service historian and conference presenter—with "a turbo-fast merry-go-round, fast as lightning with the feeling of a roller coaster." The park, featured in the Tom Hanks movie *Big*, survives partly due to the continuity of generations and an owner, the local county, that embraces its status as a national historic landmark.

Still, what happens when the current generation goes? "Our country moves so fast," Sam says. "What makes money sticks around and is copied and what doesn't is quickly discarded and built over. If you're the private owner of a carousel, you're under constant pressure to cannibalize the pieces, sell them to an auction house, put fiberglass repros on the machine. Where do you put the money? You can't preserve every stick, you can't compete with Six Flags."

Out on Washington's southeast border, the life I knew is already a discard. A metro station took down our tin-roof cottage, once enveloped by a muscular stand of trees. East Capitol Street, all six lanes of it, gallops into the suburbs. The scene's defining structure, a brutish warren of apartments, is now an open field of furrowed clay.

**Above, right: Past meets present. "At a collector's day last year, people were in tears," says Ranger Sam Swersky about the emotions stirred by the site. "Everyone has their own story, but it strikes me how much the stories are the same. When I first started working here it was a little spooky. But now I think it's shared humanity coming through."**





# M INING MAJESTY

SEEKING THE SILVER LINING IN A PROSPECTING PAST | WRITTEN BY JOE FLANAGAN | PHOTOGRAPHED BY JET LOWE

**Looking toward the San Juan Mountains at night**, the thought hits you that the West was never entirely won. Here, night is a massive presence. If you're standing on the street of a small town in southwestern Colorado, you don't have to look at the horizon to feel the dark sea of forbidding geography that lowers over everything like a reminder of the eternal. In daylight, the ranches along the Animas River disappear as the mountains close in and you ascend toward the crags of the Continental Divide. To say that the landscape is beautiful falls far short of the truth. To say it is harsh is inadequate, too. But the adage "some things are better left alone" seems as true in the 21st century as it was in the 19th.

RIGHT: REMNANTS OF A MINING LEGACY IN COLORADO'S SAN JUAN MOUNTAINS.





***SILVERTON HAS ALL THE AURA OF THE CINEMATIC WEST, FROM THE RUSTIC STOREFRONTS TO THE WIDE, STRAIGHT MAIN STREET, TERMINATING AT EITHER END IN THE SPECTACULAR PRESENCE OF THE SAN JUAN MOUNTAINS.***

**TOP: SILVERTON AS IT LOOKED AT THE BEGINNING OF THE 20TH CENTURY. BOTTOM: A PACK TRAIN HEADED FOR THE MINES.**

And that is why it comes as such a surprise to discover, tucked away in isolation at over 9,000 feet, a well-kept Victorian town whose bright paint and architectural flourishes seem the very repudiation of wilderness.

At first sight, one might suspect Silverton was once an exclusive resort, an economic phenomenon that has since melted into the mountainsides. The town is a relic of mining history, a national historic landmark built in the pursuit of precious metals. Silverton has all the aura of the cinematic West, from the rustic storefronts to the wide, straight main street, terminating at either end in the spectacular presence of the San Juan Mountains.

While the town is remarkable in its own right, a good part of its historical importance lies in an unprepossessing building on the outskirts. The Shenandoah-Dives Mill shows how it was done,

how gold, silver, lead, copper, and zinc were taken from the raw rock of the mountains. Built in 1929, the mill brought the latest technology, a process called flotation, which ushered in mining's modern era. There are only four mills like it left in the United States, and only the Shenandoah-Dives is in its original condition. It, too, is a national historic landmark.

Last summer, the NPS Historic American Engineering Record compiled a history of the site, documented in large-format photographs and architectural drawings. HAER is working with the San Juan County Historical Society, which owns the complex, to preserve and interpret the place. "It's so visible on the landscape, and so much a part of the culture of the town," says David Singer of Silverton Restoration, Inc., a consultant to the society. "People are really holding on to this piece of their history."

**BELOW: THE MOUNTAINS AROUND SILVERTON WERE POPULATED WITH MINES AND MILLS SUCH AS THIS ONE AT SILVER LAKE, NORTH OF TOWN.**



THIS SPREAD SAN JUAN COUNTY HISTORICAL SOCIETY

### **ELUSIVE METALS**

Though it sounds like an esoteric industrial term, flotation milling was a bright flash not only in the West, but in the global economy as well. It arrived when the mining industry was in crisis. Many of the richest deposits had been tapped out. What was left—low grade ore—was so hard to cull it was seldom worth the trouble.

With the advent of flotation, valuable metals spread far and thin among raw, useless ore could be extracted with relative ease. Complex minerals could be unlocked, their prized components separated out. In short, the process worked like a powerful magnet for scarce needles in a very large haystack.

Aside from a brief excursion by 16th century Spanish explorers, the mountains had been the domain of the Ute. In 1860, a prospector named George Baker led an expedition into what is now

Silverton. The group found some gold but several were killed by the Indians, and the rest were stranded over the winter. Some died of cold and starvation. No one visited again until after the Civil War.

Prospectors were back in 1870, and before long the conflict with the Utes was at a boil. In negotiations with the U.S. Government, the tribe relinquished four million acres in exchange for annual payments. Mining boomed, and towns like Silverton, Ouray, and Telluride grew up quickly. Gold and silver were abundant. By all accounts, Silverton was rough, wild, and dangerous. There was gambling, drinking, and the full complement of vices associated with the frontier. Between mining accidents, fights, and vigilante justice, there were, as the literature of the historical society says, “many opportunities to die violently.”



The first few years were rich. Mining companies placed ads in foreign newspapers, promising work and the chance to own land, a tactic that lured people from all over the world.

The hard winters, bad roads, and inefficient processing made mining a difficult business. The only way to move goods in or out was by pack animal, which was expensive and slow. In time, the rich ores near the surface were exhausted, and the town entered its first dry spell.

The railroad, which arrived in 1882, redrew the picture. The mining companies could fill entire railcars. Before, they hauled ore by horse or mule to a smelter 46 miles south in Durango. Now it was economically feasible to dig out tons of low-grade ore. While silver and gold remained the most prized, lead, copper, and zinc came into their own with the rapid advance of industry.

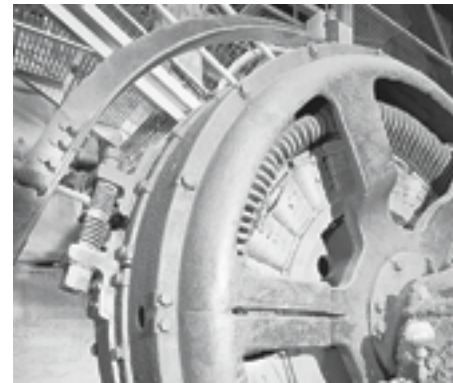
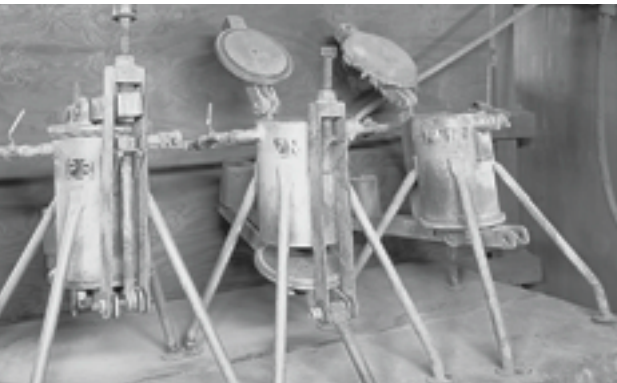
#### ALL THAT GLITTERS

Flotation is a process in which ore is immersed in a water-and-chemical solution and valuable minerals are “floated” away from the other material assisted by their difference in weight. Bill Jones, a member of the historical society and an assayer who worked at Shenandoah-Dives, says the process uses the law of opposite things attracting and similar things repelling. “The trick is to add chemical agents that either promote or suppress the attraction.”

In the 1860s, it was established that ore ground into fine particulate—and mixed with water and oil—would attach to the latter. When agitated, the minerals separated out even more readily. Inventors, adding acids, salts, and heat, saw that minerals clung to air bubbles on top of the mix. A 1903 English patent—which used bubbles in concert with oil, soap, alkali, and agitation—is the forerunner of modern flotation. By the time Shenandoah-Dives was built, there had been many advances, and the facility was state of the art.

Opening the door to the mill on a frigid December day releases a wave of cold that rivals the outdoors. The concentrated mass of hardware makes it difficult to see its purpose. Every square inch, it

***WHILE THE TOWN IS REMARKABLE IN ITS OWN RIGHT, A GOOD PART OF ITS HISTORICAL IMPORTANCE LIVES IN AN UNPREPOSSESSING BUILDING ON THE OUTSKIRTS. THE SHENANDOAH-DIVES MILL SHOWS HOW IT WAS DONE, HOW GOLD, SILVER, LEAD, COPPER, AND ZINC WERE TAKEN FROM THE RAW ROCK OF THE MOUNTAINS.***



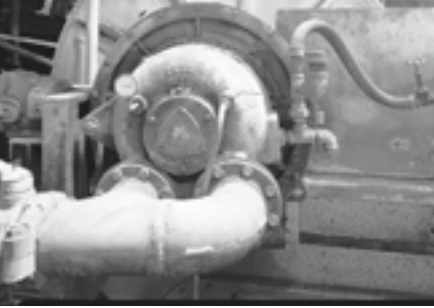
LEFT AND ABOVE: HISTORIC HARDWARE, THE APPARATUS USED IN THE FLOTATION PROCESS.

The mines boomed through much of the 1880s, slumped after the economic crisis of 1893, and came back with World War I. But by the time Denver’s Stearns-Roger Engineering Co. arrived in the spring of 1929—with the latest construction innovations, steamshovels and dumptrucks—Silverton was dozing through another downturn. The company was focused on gold, but it soon became apparent that flotation had the potential to extract plenty of money from the abundance of low-grade ore.

seems, was used to maximize production. The place must have been terribly noisy, but now the only thing that breaks the silence is the occasional ice sliding down the corrugated roof.

As the ore came out of the mine, a metallurgist crushed a sample, analyzed the content, and worked out the optimum chemical equation to extract the metals. He relayed the information to the mill, which set up accordingly.

The flotation circuits were tailored to specific metals. There was a method to isolate zinc, to isolate lead, to isolate copper. A circuit could be adjusted to isolate one mineral one day and a different mineral the next.



ABOVE SAN JUAN COUNTY HISTORICAL SOCIETY, BELOW NPS/HAER

LEFT ABOVE: THE MILL'S INDUSTRIAL-SIZED WATER PIPES. RIGHT ABOVE: VICTORIAN ERA RESIDENTS OF SILVERTON.

The raw ore, arriving from the mine by aerial tram, was crushed into small particles, then mixed with water. This was sent through a series of jigs, encouraging the heavier gold and lead to settle out. The rest continued on to the flotation cells—long, rectangular troughs equipped with agitators. A mineral-rich froth formed at the top, bubbles like glistening metallic spheres. This was skimmed off, dried, and readied for transport.

Where all this took place is a compaction of catwalks, encrusted vats, channels and gears, impellers and conveyors. A delicate chrome wheel—whose small silver cups doled out precise measures of chemicals to the churning sludge—stands out conspicuously. On its face, in a fussy cursive script, are the words, “Clarkson Reagent Feeder.”

Over time, metal grillwork replaced the mill’s heavy wooden planks. This gives the effect of being surrounded in all directions by industrial hardware. Looking down into two great vats—one for zinc, one for lead—there are a pair of immense blades, now-silent agitators that once helped the heavier materials separate to the bottom.

### THINKING BIG IN A SMALL TOWN

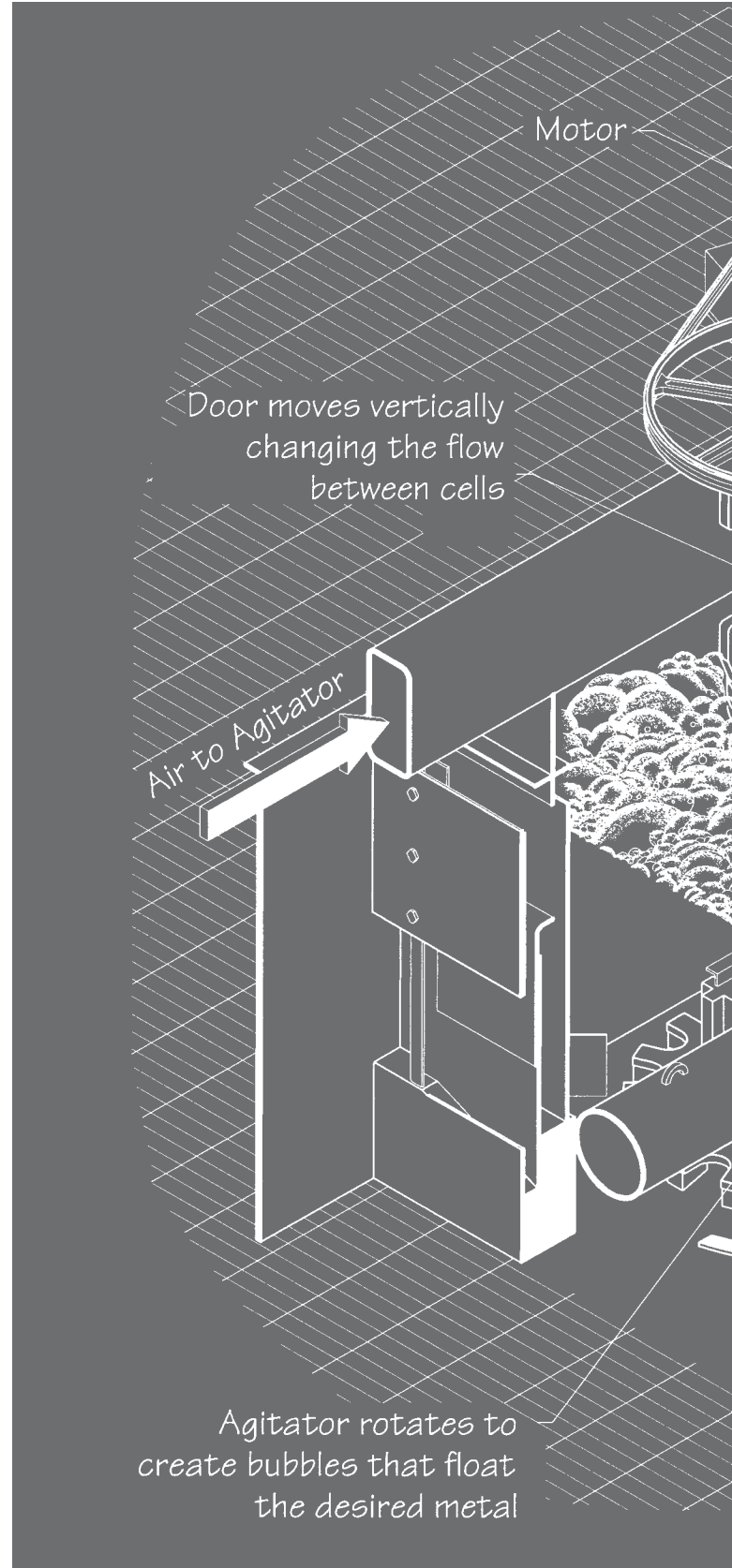
For a small organization, the San Juan County Historical Society has made quite an impact. Oddly enough, the demise of the mill spelled Silverton’s renaissance. “People started to think, ‘What do we have here of value?’” says Singer, who’s managing the mill’s documentation. Mining was a thing of the past, but the past was now an economic asset. The catalyst was the 1974 fire that gutted the train depot. The railroad donated the building to the society, which restored it and sold it back. An adjacent building underwent a similar process. Says Bill Jones, “It became a cycle. We had a banker who was fairly savvy and had roots here. He’d lend us money to fix up a building and then we’d resell it. It just kind of snowballed.”

The society was soon a successful business with a knack for attracting partners and money. The town’s diminutive size was a plus, the society’s connection very close because, as Singer puts it, “people who sit on the historical society are the people who run the gas station, the T-shirt shop, etcetera.” Says Jones, “virtually everybody on the board of directors worked for the company at one time or another.” Silverton recently built a museum in the local Victorian vernacular.

When Colorado legalized gambling in some of its depressed mining towns, it instituted a tax used toward an historical fund—matching grants that the society uses to advantage. Silverton also qualifies for assistance from the Colorado Economic Development Agency.

In 1991, when the mine announced it was going to close, the society approached the Sunnyside Mining Co.—the current owner—and simply asked for it. There was the thorny issue of the tailings

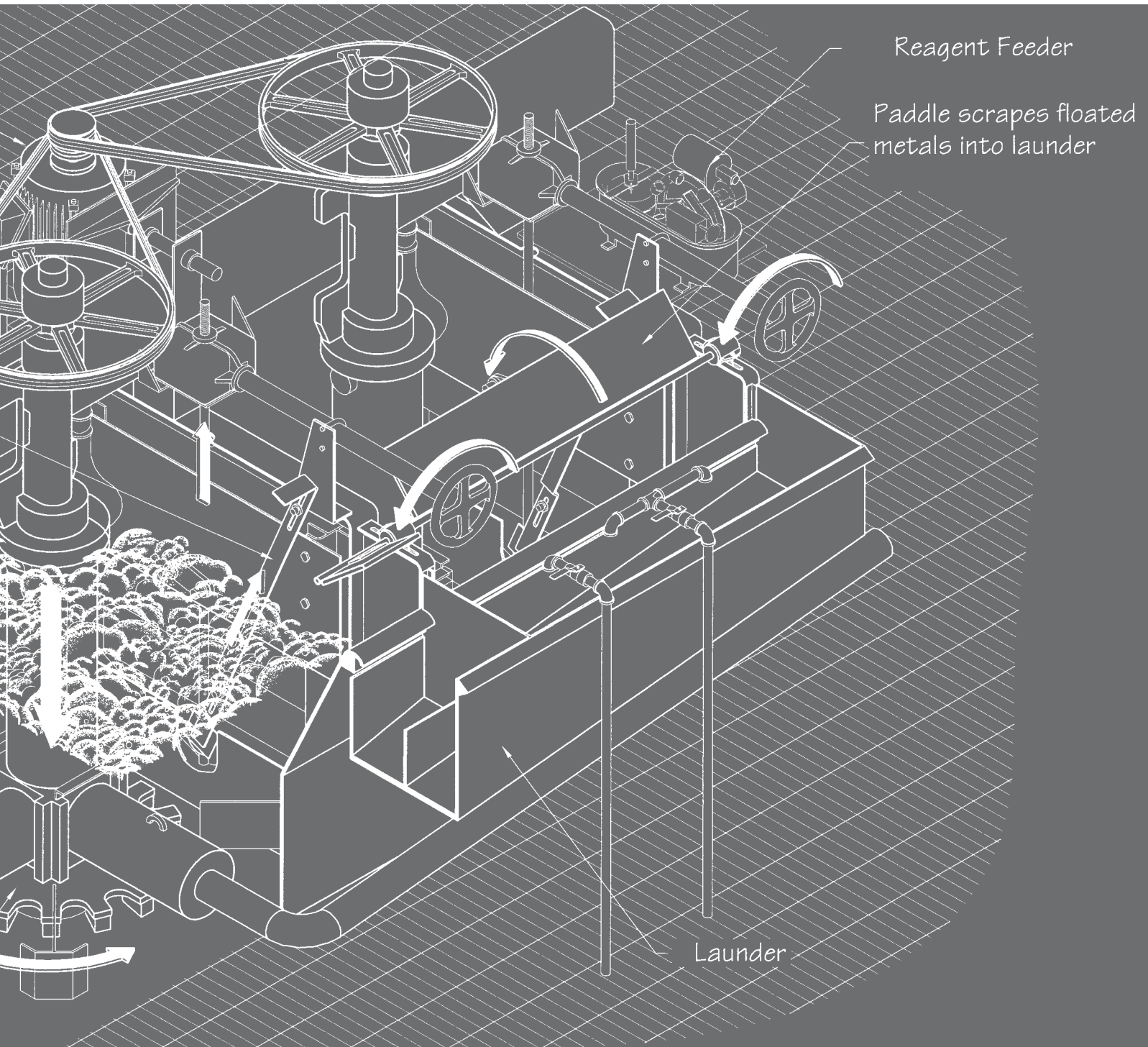
RIGHT: FLOTATION CELL, HEART OF WHAT MAKES THE MILL A NATIONAL LANDMARK.



Agitator rotates to create bubbles that float the desired metal



**THE HARD WINTERS, BAD ROADS, AND INEFFICIENT PROCESSING**  
MADE MINING A DIFFICULT BUSINESS. THE ONLY WAY TO MOVE GOODS IN OR OUT  
WAS BY PACK ANIMAL . . . THE RAILROAD, WHICH ARRIVED IN 1882, REDREW THE  
PICTURE. THE MINING COMPANIES COULD FILL ENTIRE RAILCARS.





**BY ALL ACCOUNTS, SILVERTON WAS ROUGH, WILD, AND DANGEROUS. THERE WAS GAMBLING, DRINKING, AND THE FULL COMPLEMENT OF VICES ASSOCIATED WITH THE FRONTIER. BETWEEN MINING ACCIDENTS, FIGHTS, AND VIGILANTE JUSTICE, THERE WERE, AS THE LITERATURE OF THE HISTORICAL SOCIETY SAYS, “MANY OPPORTUNITIES TO DIE VIOLENTLY.”**

LEFT: A MINE OPENING IN KING SOLOMON MOUNTAIN.

ponds, reservoirs of chemical-laden water. That brought the EPA into the equation. But when the company offered to retain responsibility for them (tests show they are safely retaining their contents), the acquisition moved ahead.

The deal also included an old electrical substation, a turn-of-the-century industrial building now in the National Register of Historic Places. The powerhouse, as it is known, was the lifeline on which the mill—and the town—depended. Its rehabilitation, currently underway, epitomizes the society’s creativity, which encourages a healthy business environment. The building will house retail businesses, with adjacent land leased or sold and the proceeds seeding more preservation. With the costly restoration of the mill looming, Beverly Rich, the society’s chairperson, plans to apply for a grant from the NPS-administered Save America’s Treasures program.

The first phase is recording the site, and the society found an eager partner in HAER. As a rare and intact example of engineering history, the site was a prime candidate. Singer, through his consulting firm, organized a partnership with the society and the National Park Service to use the project as an educational opportunity. They conducted workshops at the site, high-tech instruction in assessment and documentation. Preservation professionals spent a week learning from National Park Service staff who specialize in the work. Singer calls the results “a living document” to guide rehabilitation. The workshops helped convince the Getty Conservation Institute to give \$25,000 toward the documentation. Other support came from the NPS National Center for Preservation Technology and Training, the Colorado Historical Society, the Mountain Studies Institute, and private donors.

**INVESTING IN HISTORY**

For a mining boss, Charles Chase was ahead of his time. “He treated his workers in a way that was not standard in the industry,” says Singer. “He saw that his economic well-being was tied to the town’s.” Says Rich, “They called him Papa. Even my Dad called him that.” When the Depression came, workers took a pay cut to keep the mill running, the only one in the Four Corners area that didn’t shut down. Under Chase, Shenandoah-Dives was the first to store toxic water in self-contained ponds rather than dumping it straight into the river, a common practice at the time.

WWII saw a spike in production and profits, but the operation “was never wildly successful,” says Jones. “It sort of eked along.” The ore wasn’t as rich or plentiful as investors hoped. The 1950s



RIGHT, FAR RIGHT SAN JUAN COUNTY HISTORICAL SOCIETY



LEFT ABOVE: WORKERS AT THE COLORADO BOY MINE, BUILT IN 1893 A FEW MILES NORTH OF SILVERTON. RIGHT ABOVE: A VIEW OF THE NEARBY SILVER LAKE MILL.

**RIGHT: ENTRANCE TO THE MAYFLOW MINE, KEY TO THE MILL'S SUCCESS. THE RUINS OF THE TRAM TERMINAL AND A BOARDING HOUSE FOR MINERS ARE VISIBLE NEAR THE CENTER.**

brought cheaper foreign metals on the market, and rising labor costs didn't help. The Eisenhower Administration, to help contain communism, encouraged businesses to buy metals from other countries, hoping to boost their economies and diminish Marxism's appeal.

The mill shut down in 1953, then ran sporadically over the ensuing decades. Silverton's population dropped by half. Mining in mountainous places has always been expensive and labor-intensive. Nowadays, it's done in large open pits, huge operations where diffuse, widespread deposits are extracted with an enormous economy of scale. Flotation is used to this day.

Bill Jones stands in the perpetual twilight of the mill. Before him is a massive electromagnetic motor, the primitive-looking source of power for the entire interconnected system. "It's one of only three

A clapboard office stands beside the mill, faded and sagging with age. Cables that no longer carry cars run up the steep slope, a pair of them still suspended motionless over an icy chasm. Somewhere up there, in drifts of snow and black outcroppings, is the entrance to the mine. The tram was itself an innovation. Avalanches frequently took out the wood supports, so the company replaced them with riveted steel towers. Because of their strength, the supports could be spaced far apart. The resulting tramway—over 9,000 feet long, operated by a 12-man crew—was featured in the 1957 Jimmy Stewart film *Night Passage*.

Today, the 123-year-old steam train between Silverton and Durango still operates. Tourists take the three-and-a-half-hour climb up here, walk around Silverton for a while, and then ride the relic—a national historic landmark—back down again.

One can imagine a restored complex as essential to the visitor experience, sitting on its small plateau above Silverton, the stilled tram directing the eye upward into the mountains, which still seem to promise heartbreak while hinting at possibility. Here is where the miner's quest resembles what the mill's stewards are trying to



**ONE CAN IMAGINE A RESTORED COMPLEX AS ESSENTIAL TO THE VISITOR EXPERIENCE, SITTING ON ITS SMALL PLATEAU ABOVE SILVERTON, THE STILLED TRAM DIRECTING THE EYE UP INTO THE MOUNTAINS, WHICH STILL SEEM TO PROMISE HEARTBREAK WHILE HINTING AT POSSIBILITY.**

built and it's the only one still existing. GE wanted it for their museum, offered to bring in a brand new one for free. The company said, "No, we're using this one." It's another of many side tours into technological history one could take in this place. Singer envisions visitors in front of one of the ore crushers, examining the inner workings in 3D on a computer screen.

In the machine shop, where mechanics repaired equipment and fabricated their own parts, the scene is as if they had just gone home the night before. The lid to a toolbox is open; an array of drill bits are scattered on a workbench; a welding helmet hangs on a nail. Jones steps out into the blinding world of sun and snow, closing the door behind him. "It's not your ordinary tourist attraction," he says.

accomplish: to draw wealth and vitality out of something that is outwardly irredeemable. Yet all the ingredients are in place for this to happen, the past emerging into the present to shine like a gem.

For more information, contact the San Juan County Historical Society, P.O. Box 154, Silverton, CO 81433, (970) 387-5609, silvertonarchive@aol.com, or visit [www.silvertonhistoricalsociety.org](http://www.silvertonhistoricalsociety.org).

**LEFT TO RIGHT ABOVE: LOCALS GATHER IN FRONT OF CROOKE'S HARDWARE MILL & MINE SUPPLIES IN DOWNTOWN SILVERTON AROUND THE END OF THE 19TH CENTURY; INSIDE THE NOW-DORMANT SHENANDOAH-DIVES MILL; AERIAL VIEW OF THE COMPLEX.**





**FIGHTING MALARIA, YELLOW FEVER, LANDSLIDES, AND COUNTLESS OTHER HAZARDS**, workers toiled for 10 years to accomplish one of the greatest engineering feats of all time, the Panama Canal. Completed in 1914 at a cost of 27,000 lives, the project was immense, its impact enormous. Ships could go from one ocean to the other in hours, the grueling journey around Cape Horn a thing of the past. Here, photographer Jet Lowe captures the turn-of-the-century ingenuity that made it possible. **IN A MULTI-YEAR PROJECT, THE HISTORIC AMERICAN ENGINEERING RECORD** documented the locks in architectural drawings and large-format photographs. Some of the original equipment is still in use, helping the waterway handle about 14,000 ships a year. **THE LOCKS, WHICH LIFT SHIPS 85 FEET ABOVE SEA LEVEL FOR DEPOSIT IN ANOTHER OCEAN**, are considered the canal's crowning achievement. No one had attempted anything like them, and building with concrete was relatively untried. Nothing to rival the canal would be seen again until the construction of Boulder Dam during the Depression. **THE CANAL WAS OPENED BY PRESIDENT WOODROW WILSON**, who pressed a button in Washington, DC, relaying a signal to New York, then on to Galveston, then on to Panama to detonate a charge that blew out the last bit of earth separating the Atlantic and Pacific. **THE DOCUMENTATION OF THE GATES, VALVES, FLOODWAYS, AND MECHANISMS** will become part of the HAER collection, hosted by the Library of Congress at [http://memory.loc.gov/ammem/collections/habs\\_haer](http://memory.loc.gov/ammem/collections/habs_haer).

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*“By all accounts, Silverton was rough, wild, and dangerous. There was gambling, drinking, and the full complement of vices associated with the frontier. Between mining accidents, fights, and vigilante justice, there were, as the literature of the historical society says, ‘many opportunities to die violently.’” —from “Mining Majesty: Seeking the Silver Lining in a Prospecting Past,” page 26*

