

# AmericanCanals

Bulletin of the American Canal Society

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Dedicated to Historic Canal Research, Preservation, and Parks

Winter 2014

## From the President

By David G. Barber

In prior editorials, I mentioned my search for photos of Illinois & Michigan Canal Lock 5 at the west end of the dam at Jackson Street in Joliet, IL (I&M Canal Dam #1). After the last mention, one member in Florida phoned to say that there was a wall-sized image of the lock in the cafeteria of the Silver Cross Hospital in Joliet. Unfortunately, when we talked, neither of us knew that the hospital had been replaced by a new building, two miles away in early 2012. Part of the old building now houses a new VA clinic. But when I visited the area on a weekend, the facility wasn't open. So, I do not know if the image survives.

However, in the Fall, 2013 issue of *American Canals* is a report on the new book *Building the Canal to Save Chicago*, by Richard Lanyon. Mr. Lanyon was a long-term employee of the Water Reclamation District of Chicago and retired as its executive director. When I received a copy of that book, I found that it included photos of Lock 5, which was rebuilt as part of the late 1890s Sanitary and Ship Canal project. At last!

There is also mention that the dam and power house at Jackson Street were rebuilt at that time, not later in 1908 as I had previously thought. The book further reports that the small lock at Lockport on the sanitary canal and the power house next to it weren't built until



The steel footbridge northeast of Wurtsboro on the Delaware & Hudson Canal.  
See the bridge story on pages 19-20.

1908, when the canal was extended two miles south from its original terminus. So, at least until 1908, the old canal through Lockport was the only available through route from Chicago to the Mississippi River.

Further leads from Mr. Lanyon's book have led me to learn that photographers working for the Sanitary District of Chicago took over 10,000 glass negative photos of the construction project and of the Illinois River all the way to its confluence with the Mississippi at Grafton, IL. These were taken to document the project and its effects for legal reasons and include all three

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# American Canals

BULLETIN OF THE  
AMERICAN CANAL SOCIETY

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of the historical navigational canals of  
the Americas; to save threatened canals;  
and to provide an exchange of canal  
information. Manuscripts and other  
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# Montezuma Heritage Park, Montezuma NY

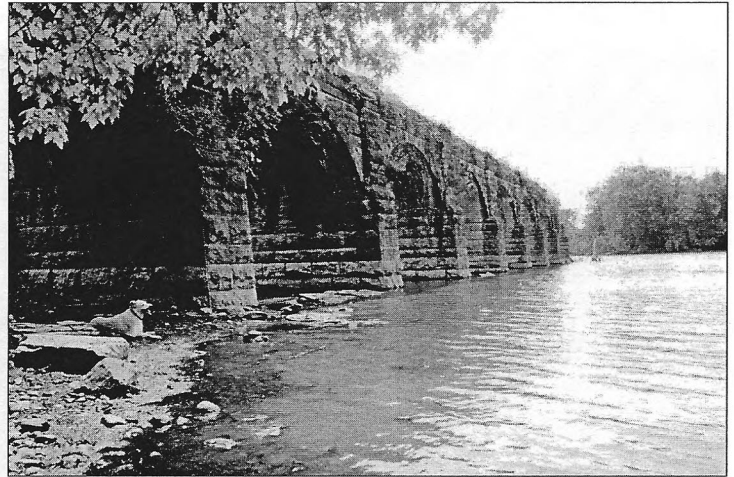
by Mike Riley

Typically, when those of us inside the canal world hear the word “Montezuma,” we tend to think about the Seneca River and Montezuma Aqueduct. The Montezuma (aka: Seneca River or Richmond) Aqueduct carried the Enlarged Erie Canal over the Seneca River on the second longest aqueduct on the canal system. In 1856, the 894-foot-long aqueduct replaced the slackwater navigation that had been in use since 1820. The name Richmond comes from Van Richmond, the designer of the structure, who was an engineer for the state. In the winter of 1917, much of the aqueduct was removed to allow the construction of the Barge Canal, which was being shifted away from the land cut to use the river channel. However, eight arches on the eastern bank and three arches on the western bank were left standing. While the western arches are now quite overgrown, the eastern remains are open and quite accessible.

The beauty of the site is that it lies within a flood plain, which has prevented people from developing the land. To reach the Montezuma Aqueduct, one must walk to it, because the nearest road is a half-mile away. As



The Montezuma Aqueduct in 2011



The Montezuma Aqueduct in 2012

visitors walk along the old towpath, which was elevated above the flood line, they are also walking within feet of the old Lock 62, which served as the eastern terminus of the slackwater navigation. This lock can still be viewed, at least the pit and gate pockets can be seen, as can foundations and wells for the locktender’s house.

Most people tend to bypass the small hamlet of Montezuma, which lies eight-tenths of a mile east of the river, along NY Route 90. Bypassing the hamlet is a mistake, as many canal sites can be found nearby, such as the big basin, the junction of the Cayuga-Seneca Canal, and the remains of the Clinton’s Ditch and Cayuga-Seneca Lock 11.

There is so much to offer canal historians and naturalists that the Town of Montezuma and the local historical society have begun the work of turning the area into a park.



In 2005, the town began working with the Cayuga County Planning Department to see what opportunities were available for the park. This was not a new endeavor, as the town had started this journey in 1966 when the town supervisor began to consolidate the land holdings along the river and around the old canal. Plans back then called for a much more formal park, complete with marina. This plan was dismissed as too expensive; however, the land remained under the ownership of the town.

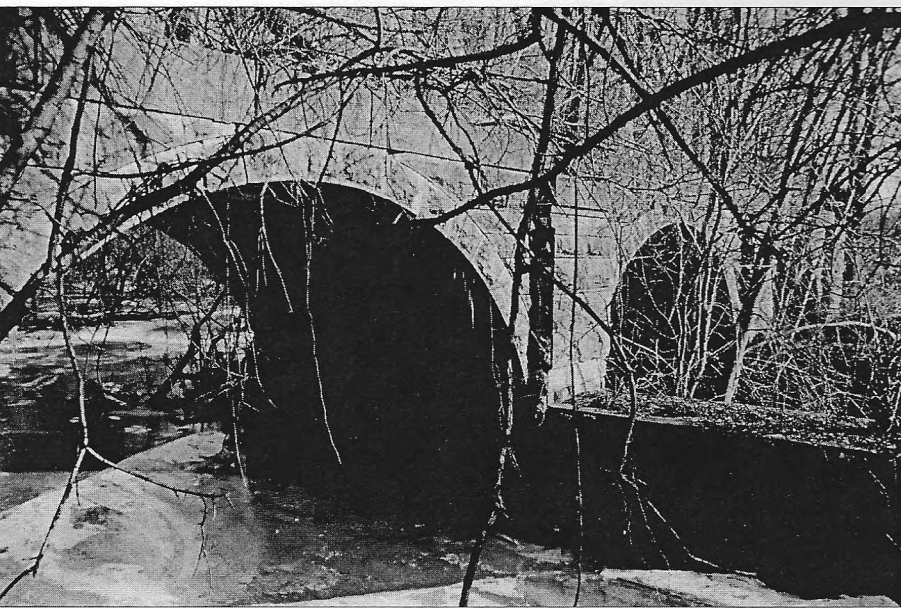
With the construction of the New York State Canalway Trail, which uses NY Route 31 and crosses the town just north of the

Cayuga-Seneca Lock 11

hamlet, Montezuma once again saw the park as an opportunity to spur local development and community pride. The local historian, Cheryl Longyear, began the work of assembling the people she needed to push this work forward. Starting with an archeological dig at the old Lock 62 in 2009, she was able to focus efforts on clearing the site and marking trails. Prior to this work, finding Lock 62 involved brush-whacking through buckthorn trees.

In 2010, members of the historical society participated in the statewide "Canal Splash" by leading a walk along the canal called, "Following the Flow." The idea of the walk was to follow the flow of water in the canal from Jordan to Montezuma. In this short section, the flow of the canal was to the west, as Jordan sits on a small summit. By starting at Jordan and walking west, the tour traced the canal through Weedsport, Port Byron, and Montezuma, where the water left the canal, spilling into the Seneca River.

The 2010 walk was a bit of an ordeal, beginning at one site and car pooling across the county. After three



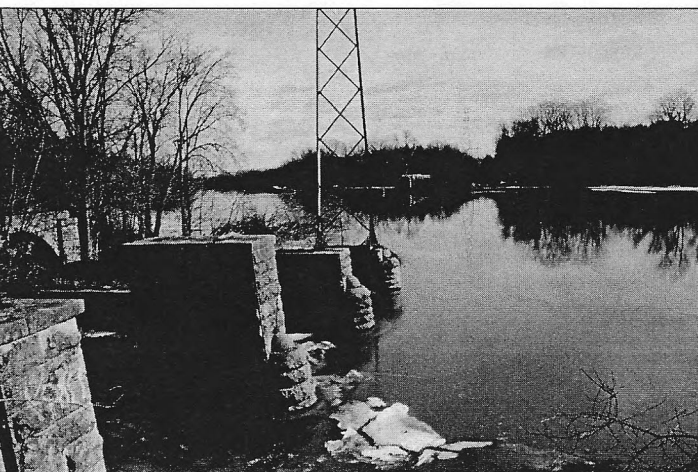
Three arches on the west bank of the Seneca River

walks and many hours of walking, it was decided to cut the event down in 2011, and then in 2012, it was decided to focus only on Montezuma. A three-hour walk was held, beginning in the hamlet and taking in many of the canal sites along the route. This walk was repeated in 2013.

The creation of the walk forced the planners to look into free publicity, and that led to the creation of blogs. The walk was covered by a blog that began with the "Follow the Flow" walk and now has now transformed into "Cayuga County Canal Tours" <http://canalsplash.blogspot.com>, which covers many canal sites throughout the county. This was soon followed by a blog that detailed the plans and work on the park,

<http://montezumaheritagepark.blogspot.com/>. The blogs and Facebook pages have been very successful in free ways to reach out to a very broad audience and have attracted people from across the nation.

A working group started monthly meetings and work sessions in 2010. Trails have been cleared to all of the major sites, these sites have been cleared, and kiosks and benches built. In 2011 a logger was hired to remove some hardwood trees. This helped to clear a trail to Lock 11, and the sales of the logs helped to fund projects.



Aqueduct as seen from the west bank

In 2010, the group was fortunate to have students from the State University of New York -- (SUNY) work on the park as part of their landscaping studies. Having an outside and young overview of the park was helpful in that it helps to show what might be important in attracting visitors. This group has been re-invited to help with the creation of a visioning plan, which is being funded by a state grant and is being written by a private consulting firm.

So what does the park have to offer? As mentioned above, the

remains of the Seneca River Aqueduct are the major attraction. However, the park also has the most complete and best preserved lock from the Cayuga-Seneca Canal. Nearby is the junction of the Erie and C&S. Just to the west, the basin from the Meil Drydock can be seen. Closer to the river are the remains of a paper mill that used rattails to make fiber-board, a reminder of how men attempted to use the Cayuga marshes as a way to make money. Throughout the park, the prism of the first Erie Canal can be seen, as the enlarged canal took a slightly different route. The hamlet is also a fascinating place to visit for what is no longer there. After the canal closed, most of the village center was burned and never rebuilt. A wide street and a few buildings are the only reminders of the past. There is also a wetland environment and riverbank trails, as well as places to launch watercraft for those who wish to see the aqueduct from the water.

On the west bank of the river are three arches from the aqueduct. These are quite overgrown, but accessible by a short walk along ATV trails. Close by are the Montezuma Wildlife Refuge and the Montezuma Audubon Center, both of which focus on the wild life of the wetlands.

The Montezuma Heritage Park helps to explain the role of man in the “conquest” of the swamps, which led to the need for the refuge. It is truly a great place to visit. For those who wish to visit and get the whole tour, but can’t make the organized walks, private tours can be arranged.

Michael Riley, [mriley20@twcnny.rr.com](mailto:mriley20@twcnny.rr.com)



### **Chesapeake and Ohio Canal National Historical Park Announces Improvements to the Williamsport Area**

Williamsport, MD – The Chesapeake and Ohio Canal National Historical Park is pleased to announce infrastructure improvements to the Williamsport area of the C&O Canal.

In December, Park Superintendent Kevin Brandt and Mike Nardolilli, president of the C&O Canal Trust, announced multiple projects along the C&O Canal at Williamsport, all to improve the infrastructure and educational/interpretive experience for visitors. Projects include raising the railroad lift bridge, repairing Lock 44, restoration of Lockhouse 44, and operation of the interpretive Launch Boat program for the 2014 season. These projects demonstrate the park’s commitment to one of its canal towns, Williamsport, and represent a major achievement despite difficult budget restraints.

Earlier in 2013 the park received a \$297,000 Transportation Alternatives Program (TAP) grant from the Maryland State Highway Administration to improve the canal water intake system at Williamsport. The project will provide a major infrastructure improvement to the canal by providing a consistent water source. Completion of this project, in combination with the raising of the railroad lift bridge, will enhance the park’s interpretive launch boat program, providing visitors with a true canal experience as they travel on the watered canal from Cushwa Basin, under the railroad lift bridge to Lockhouse 44, and through an operating lift lock.

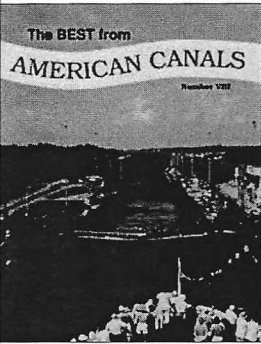
Last month the park received an additional \$33,000 donation from the C&O Canal Trust, the Park’s official nonprofit friends organization, in support of the innovative Canal Classrooms educational program, piloted in Williamsport this year. The program focuses on building sustainable practices by engaging school districts and the community in education and interpretive programming. It’s the first of its kind in the National Park Service and will expand to other park locations next year. Educational programming at Williamsport continues to enrich the curriculum of Washington County students, serving every 4<sup>th</sup> grade student each year.

The Chesapeake and Ohio Canal National Historical Park is committed to improving the visitor experience through educational and interpretive programming. Collaboration with the Town of Williamsport and other communities adjacent to the park, as well as partnerships with the C&O Canal Association, Washington County Convention and Visitors Bureau, State Highway Administration, and the C&O Canal Trust, make improvements and enhancements to education and interpretive programming possible.

For more information please contact the C&O Canal Williamsport Visitor Center at 301-582-0813.

## ACS Sales

If you haven't checked the ACS website lately, you might not know that the society has the following items for sale:

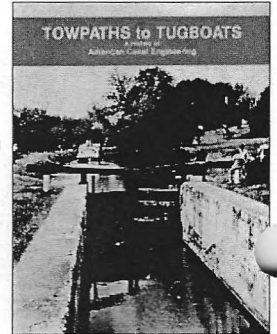


Best from American Canals #1	published 1980	\$4
Best from American Canals #2	published 1984	\$4
Best from American Canals #3	published 1986	\$4
Best from American Canals #4	published 1989	\$4
Best from American Canals #5	published 1991	\$4
Best from American Canals #6	published 1993	\$5
Best from American Canals #7	published 1996	\$5
Best from American Canals #8	published 1998	\$6

<i>Towpaths to Tugboats</i>	published 1995	\$6
American Canal Guide #1: West Coast	published 1974	\$1
American Canal Guide #2: South, NC to FL	published 1975	\$2
American Canal Guide #3: Lower MS & Gulf	published 1979	\$3
American Canal Guide #4: WV, KY, Ohio River	published 1988	\$3 (Copies Only)
American Canal Guide #5: DE, MD, VA	published 1992	\$3
20 year American Canals Index 1972-1992	published 1992	\$2
Canal Boat Construction Index (12 pages)	published 1992	\$2
Canal Terminology (100 pages) Hahn & Kemp	published 1998	\$15
A Picture-Journey Along the Penn. Main Line Canal	published 1993	\$10

ACS Burgee (blue on white cloth)	\$15
ACS cloth sew on patch (2"x3" red, white & blue)	\$3
"Save Your Local Canal" bumper sticker	\$1

**Shipping and handling:** first two items \$4; each additional item \$1. Checks payable to: American Canal Society. Send orders to: Robert H. Barth, 214 N. Bridge Street, Somerville, NJ 08876-1637; 908-722-7428; barths@att.net. Please call or email with questions.



### From the President (continued from page one)

diversions from Lake Michigan. The negatives were long forgotten, but were recently discovered and are now safely stored with the Illinois State Archives in Springfield. But cataloging and digitalization are incomplete. Interestingly, the state archives and the state library are separate governmental units.

The rebuilt Lock 5 served until the Illinois Waterway project of the early 1930s. That project involved larger locks and deeper water. It was begun by the State of Illinois, but completed by the Army Corps of Engineers. Interestingly, the wall on the west side of the Illinois Waterway under and north of the present Jackson Street/Bridge Street bridge is the towpath wall of Lock 5. The upper towpath side gate pocket remains and the anchor hardware that held the top of the gate is still visible from the bridge. The bridge abutment replaced the lower gate pocket. The opposite east abutment of Dam #1 also still remains (see photos on our web site).

Many of the images in the collection are included in a second book, *The Lost Panoramas, When Chicago Changed Its River, and the Land Beyond*, by Richard Cahan and Michael Williams, which is available through Barnes and Noble.

Interestingly, as I have looked at the two books and discussed the collection of images with the authors and the Illinois State Archives, I have found that they include images of Lock 5, the Guard Lock at Jefferson Street in Joliet, the larger-than-canal-sized 1908 lock at the Lockport powerhouse, and the late 19th-century lock at Bridgeport. So far, no one has discovered images of the 1899 towpath bridge across the Des Plaines River north of Joliet. I plan to share these images with you in *American Canals* when I receive copies. For anyone interested in the I&M Canal, the Illinois Waterway, or the connections to Lake Michigan in the late 1890s and early 20th century, this collection of photographs is a tremendous resource.

# Locked and Dammed: Ohio River project decades late, billions over

By Len Boselovic/Pittsburgh Post-Gazette

*This is the second of a four-part series.*

OLMSTED, Ill.— The motto of the U.S. Army Corps of Engineers is "Essayons" -- French for "Let us try."

Since 1993, the Corps has been trying to build locks and a 2,500-foot dam across the Ohio River at Olmsted, Ill., about 20 miles upriver from where the waterway joins the Mississippi River.

When the project was authorized in 1988, the estimated cost was \$775 million, and the Corps expected to complete it by 2000. Nearly two decades later, the Corps has spent double the original estimate and the work is only 40 percent complete. Officials estimate it will take another \$1.6 billion to complete by 2024--24 years later than expected.

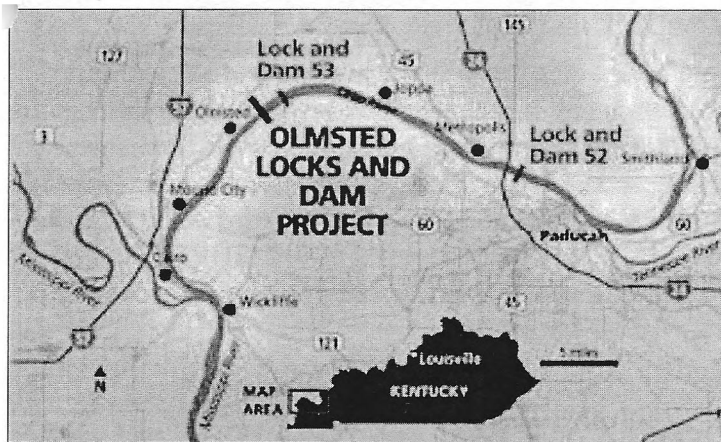
The latest price tag on the project, \$3.1 billion, added \$1 billion to an estimate made just a year ago. The news, delivered at congressional budget hearings, stunned industry officials even though they had learned last summer (2011) that another hefty price hike was in the works.

"It's a huge, catastrophic blunder for the Corps," said Dale Roth of the Carpenters' District Council of Greater St. Louis, which represents half of the union workers at the 160-acre project. "If you were the CEO of a major corporation and made a \$3 billion blunder, somebody would be out of a job," he said.

In a statement, the Corps said the original \$775 million estimate was too low and that "multiple factors" have caused estimates to increase over the last 15 years. They include challenging conditions at the construction site and inflation. The Corps is investigating "potential improvements in construction methods, contracting techniques and management approaches," the statement said.

Unanticipated costs are to be expected at a project the magnitude of Olmsted, which occupies riverfront property that could hold 150 football fields. One transportation official compared it to the Egyptians building the pyramids.

But cost overruns have gone viral with the dam at Olmsted, which contractors started building in 2005.



Three years earlier, contractors completed the twin 1,200-foot-long locks adjacent to the dam at a cost of \$271.5 million. Those locks sit idle until the dam is completed.

Some of the unexpected costs can be blamed on weather and river conditions, which limit the time crews can spend building and make the work more tedious. Other added costs stem from the congressional system of piecemeal funding, the Corps' fateful decision on how to build the dam, and the fact that no contractor would bid unless taxpayers assumed the risks of construction delays pushing up the price.

The fourfold increase in price has created a dam of its own. Because Olmsted devours the lion's share of the \$170 million available to the Corps each year to replace or repair aging river infrastructure, work on other critical projects -- including modernizing locks and dams on the Monongahela River -- proceeds at a snail's pace.

Locks and dams -- which move about 550 million tons of coal, grain, and other vital commodities annually -- are falling apart faster than Congress is providing money to replace or repair them. "This is a ticking time bomb. It's not a matter of if but when there will be a catastrophic failure on our inland waterway system," said Michael Hennessey, chairman of the National Waterways Foundation, a research group funded by companies that move goods on rivers.

Olmsted is the Corps' top priority. Its new locks and dam will replace two sets of locks and dams upriver, near where the Tennessee and Cumberland rivers join the Ohio. Those handle about 90 million tons of cargo annually, making them the busiest locks on the 11,000-mile inland waterways system.

"It's the No.1 priority, and that's where all the money goes. No other place sees any money because of it," said John Fedkoe, the owner of Tow Line River Service, a Neville Island barge operator.

Pushing completion of the project back a quarter of a century means that many more years of spending millions of dollars to maintain facilities elsewhere that are slated for destruction.

The Corps faces the same Sisyphean task at its No. 2 priority: modernizing locks and dams on the Monongahela River at Braddock, Elizabeth, and Charleroi. A new dam at Braddock was finished in 2004, the year the entire project was supposed to be completed. Instead, that is the only component of the \$1.4 billion project that is operating. Once new locks are built at Charleroi, the dam and locks at Elizabeth will be torn down, eliminating one stop on the 30 miles of river between Charleroi and Braddock.

The Corps expects to complete the Mon project in 2024 at the earliest. Until then, it must keep the 105-year-old locks and dam at Elizabeth and a Depression-era lock at Charleroi patched together so the 10 million tons of coal and other commodities that move along that stretch of river each year can get to the industries and consumers who depend on them.

Among the major structural problems are a corroding dam foundation at Elizabeth and deteriorating, unstable concrete walls at Charleroi. If stop-gap measures fail, Corps and industry officials said the dam would be out for at least three years, closing the Mon to barges moving coal to power plants. Consumers and industry would face \$1 billion in extra electricity costs, according to a study prepared for the Corps last year.

The irony of caring for increasingly obsolete river infrastructure slated for the scrap heap is not lost on one member of Congress. "We've been spending money to keep the Elizabeth dam from collapsing so we can tear it down," said U.S. Rep. Tim Murphy, R-Upper St.Clair.

### **'...down the Olmsted hole'**

Mr. Roth, the union critic of cost overruns at Olmsted, is a director of the Waterways Council, whose members include barge operators and commodities producers. Those companies pay a 20-cent-a-gallon tax on the diesel fuel that powers barges.

The tax revenue, about \$85 million a year, provides 50 cents of every \$1 the Corps spends at Olmsted and every other major construction project. Matching funds are provided by U.S. taxpayers. That means about \$170 million is available each year to fund an \$8 billion backlog of work needed to replace or make major repairs to locks and dams on the rest of the nation's rivers.

"There are a number of projects on our rivers that are going to be frozen in their tracks if we keep pouring money down the Olmsted hole," said Dan Mecklenborg, senior vice president of Ingram Barge, a Nashville, Tenn., company that operates a fleet of nearly 4,000 barges. He and other industry officials see red any way they look at Olmsted. The latest \$1 billion cost increase amounts to \$225 million more than the project's original estimated cost. The Corps already has spent \$1.5 billion--double the original cost--with half of the money coming from the tax on diesel fuel.

"We have already paid for all of the original estimate," said Stephen D. Little, president of Crouse Corp., a Paducah, Ky. company that operates 1,000 barges and moves 30 millions tons of cargo a year. Industry officials are disturbed that they have no say in how Congress funds the projects or how the Corps manages them.

"We're expected to write a blank check. We have to pay for half of this, and we have no control over it," said Peter Stephaich, chairman of Campbell Transportation, a Houston, Pa., company that operates a fleet of 500 barges.

The Olmsted project is on the site of a former cat litter plant, 964 miles down the Ohio from Pittsburgh. The depth of the river at the construction site fluctuates 40 to 45 feet a year, depending on snow and rain upriver. That limits the time crews can spend working in the river.

That's only one factor that affects what it will cost to build the dam. There's also the New Madrid fault, located about 30 miles away in Cairo, Ill. Seismologists say if a major earthquake occurred east of the Rockies, its source would most likely be the New Madrid fault.

"It played into every bit of the design," said Bill Gilmour, the Corps' resident engineer at Olmsted. But two other challenges loom even larger than Mother Nature.

When the Corps builds an Army base or some other military project, Congress provides all the money up front. With funding in hand, the Corps can purchase construction materials and schedule work efficiently. But lock and dam projects are subject to the whims of politicians and the federal budget process.



Funding varies from year to year, forcing the Corps to break up massive projects into bite-size chunks and multiple contracts. At Olmsted, that means purchasing steel, concrete, and other materials in installments and at

higher prices. It means mobilizing and demobilizing construction equipment and a workforce that ranges from 250 to 500, depending on funding and weather. The results are cost overruns and construction delays.

“It’s not an unfortunate outcome. It’s a guaranteed consequence of the way we do things,” said Michael Steenhoek of the Soy Transportation Coalition, an industry group lobbying for changes in how waterway improvements are funded.

“How you allocate money is just as important as how much you allocate,” he said.

### **A bit like giant Legos**

Another sore point is the way Olmsted’s dam is being built. Traditionally, construction crews embed massive walls of sheet steel in the river to create a so-called cofferdam that diverts water around a rectangular section of the river bed. Water inside the cofferdam is pumped out, creating a dry hole where the dam can be built.

In 1997, Corps officials decided to build the Olmsted dam “in the wet.” They believed that would save \$64 million and shorten the construction schedule.

Building “in the wet” involves assembling 42 massive shells made of concrete and steel on dry land, moving them into the river and guiding them 60 feet down to the bottom where a network of more than 3,000 24-inch-diameter tubes anchors the dam’s foundation. The largest shells weigh 3,700 tons and are 125 feet long, 102 feet wide, and 30 feet high. Each shell takes six to nine months to build.

When river conditions are tame enough, a 10-story, 5,300-ton crane that travels on rail lifts a shell from where it is assembled to a cradle that rests on 104 23-inch wheels. From there, the shell and the cradle roll down an incline at a pace of 1 foot per minute, taking two days to reach the river bank. It is transferred to a catamaran barge, which moves it into position over the network of tubing, then gradually lowers it to the river bottom. The margin of error for placing the shell on the foundation is three inches or less. From dry land to river bottom, the shell’s journey takes three weeks.

Last summer, workers at Olmsted expected to set seven shells. A hole was dug in the river bottom big enough to accommodate them. But because of spring flooding and high river speeds caused by a drought last fall, workers only had time to set three shells.

When construction crews return this summer (2012), they will have to clear out a 25- or 30-foot mound of sand, mud, and other debris that settled in the hole. Clearing the debris will take several weeks or more, Corps spokesman Jon Fleshman said.

The way the contract was bid is also an issue. The Corps originally sought a fixed-price bid that would have made the winning contractor assume the risk of completing the project on time and on budget.

“Nobody bid on the job,” said Col. Luke T. Leonard, who in July took command of the Corps’ Louisville, Ky., district, which oversees Olmsted.

The Corps switched to a contract that required the government to reimburse contractors for costs and pay them a fee for doing the work. When it was awarded in March 2004 to a joint venture between Washington Group and Alberici Constructors, the contract was valued at \$564 million.

“We pay for everything. If their guys work overtime, we pay,” Col. Leonard said. “We absorb the risk here.”

Col. Leonard said the Corps will re-examine its decision to build in the wet and whether it makes sense to switch to more conventional methods for a 1,700-foot section of the dam.

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## A Five-Generation Canal Family

(The D&H Canal Lock Tender at “Lonesome Lock”)

### Part II

#### More on the link between the Coryells and the Revolution:

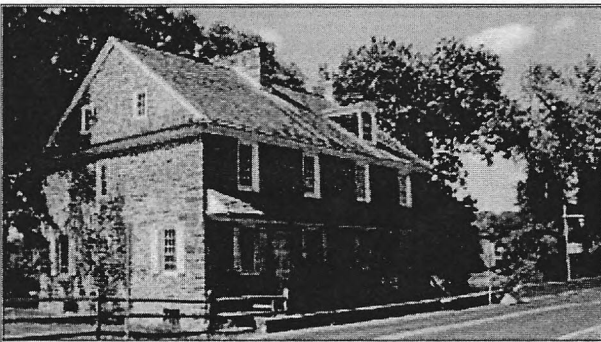
George Washington was introduced to the Coryells through Lt. George (1) Coryell. George had served under Washington during the French and Indian War in 1759 and later as a captain was assigned to Washington’s headquarters during the War for Independence.

At least six Coryells served the colonial cause in a number of ways. Cornelius (1) in our line of interest was considered a “confidential agent” (today we call them spies) to Washington. He held no official rank and therefore his stealthy achievements are shrouded in mystery. His role was providing information on British troop positions and movements and more importantly, conveying intelligence on the local terrain and population to Washington. On one occasion, he led Washington to the top of Goat Hill above the Jersey side of the ferry (across the Delaware) on a reconnaissance mission. Washington on his white steed is portrayed as a small figure on a hill above Coryell’s Ferry by painter Joseph Pickett in his primitive rendering canvas. Cornelius’ obituary in 1831 stated that he was “a sterling patriot of the Revolution.”

In preparation for his historic crossing of the Delaware, General George Washington had ordered that all the boats along the Delaware for miles in both directions were to be secured and hidden. The Coryells’ knowledge of the river and the location of watercraft were instrumental in carrying out this order. Washington on his tour to Goat Hill near the ferry convinced him that the boats were secure behind heavily wooded Malta Island in the Delaware River. Spy Cornelius Coryell (1) provided intelligence, but innkeeper/ferryman Abraham Coryell (2) led that tour. Washington’s purpose was two-fold; to hamper the British from commandeering boats to cross the river and attack the Continental troops and militia bivouacked in Pennsylvania, and to use the boats on his historic attack on the Hessian garrison in Trenton. Thirty-five boats, including 16 Durham boats four scows, were floated down the river from their hiding place to Washington’s intended crossing site, and the rest is history.



Washington chose the crossing point for the main contingent at the ferry seven miles south of Coryell’s. McKonkey’s Ferry (below) thus preempted Coryell’s in the history books. McKonkey’s is now known as Washington’s Crossing on both sides of the river and there are state parks commemorating this historic place. Protecting Washington’s left flank and cutting British general Cornwallis’ lines of communication was a contingent under the direction of Captain William Washington (third cousin to the general). His second-in-command was Lt. James Monroe, who was to become the fifth president of the United States. Capt. Washington and Lt. Monroe crossed at Coryell’s Ferry, while General Washington crossed with the main force to the south. Where did Washington’s forces cross the Delaware on the night of



December 25, 1776? It might be said...two ferry crossings, including Coryell’s.

Later Lt. Monroe and Capt. Washington joined the main force in Trenton. Both were wounded in the battle, with Monroe being evacuated to the Coryell’s “tavern” by the ferry landing that in 1760 had been obtained by Abraham Coryell (2). Historians may disagree on whether the Battles of Trenton and Princeton were more than skirmishes that proved to be the turning point in the war, but they were Washington’s first victories and began to attract the attention of the French as to the vulnerabilities of their enemy, the British.

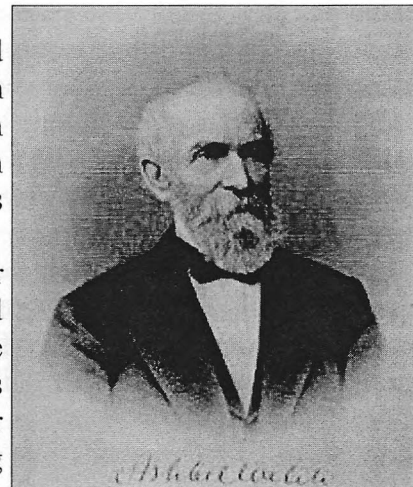
Following the war and resumption of normal domestic commerce, the ferry continued for 65 years

following its founder Emanuel's death. A covered bridge was to render it obsolete, but there was another waterborne mode of transport emerging at the turn of the 19<sup>th</sup> century, the towpath canal and specifically, the Delaware and Raritan Canal feeder passing through what was then renamed Lambertville.

### Coryell's Ferry, the River and the Canal(s):

Coryell's Ferry and the Delaware River are steeped in the history of inland navigation. The river not only hosted the Emanuels' ferry scow, but also, in turn, the bottom of river rafts, and the hulls of Durham boats, canal boats, and even an ill-fated steamboat enterprise. The succession of those river modes are treated elsewhere more comprehensively, but we will focus on the canal component.

There was a familial connection between the Coryells and the Delaware and Raritan Canal (D&R). His name was Ashbel Welch (photo, right). Welch played a key role as overseer in the construction of the Delaware and Raritan Canal Feeder between Bulls Island and Trenton farther downstream. Though not of Coryell blood, Welch did marry a Coryell whose grandfather was Abraham (2) the innkeeper during the Revolution.



Make no mistake, while designated as the feeder and of somewhat smaller dimension than the main line of the D&R, the feeder canal was navigable and an authentic towpath canal. Coryell's Ferry, by this time renamed Lambertville (to the consternation of many local citizens and the Coryells themselves), was the major northern terminus of the canal feeder, though it did extend farther north into a relatively uninhabited area along the Delaware River. After being credited with the completion of the D&R Feeder in 1834, Welch next began the construction of the Belvidere Delaware Railroad, which used extensive portions of the towpath for its right-of-way and track. This caused the canal management to shift the towpath from the river side of the canal to the uphill or former berm bank. The irony here is that the feeder canal and its banks reverted to their former appearance after the railroad was abandoned. The watered canal is preserved as a water supply, and the former railroad track looks like a towpath as a contemporary bike and hike trail with the berm bank returning to its natural state. Most of the canal feeder is preserved as a water utility and linear state park (1974), presided over by the D&R Canal Commission, which has regulatory powers. A similar preservation effort exists on the Pennsylvania side of the river as the Delaware Division of the Pennsylvania Canal system is now the Delaware Canal State Park.

The influence of the Coryells in their former namesake village had been diminishing. The renaming of the town by State Senator Lambert through his petition for a post office had been a blow to the prestige of the family. Manufacturing and railroad shops activity peaked in the post-Civil War period and then diminished into the 20<sup>th</sup> century. The ferry was gone, followed by a succession of three bridges (not including the U.S. Route 202 bridge to the north). The canal became inactive in 1932, and the railroad was abandoned in the 1960s with the Penn Central merger and route rationalization. Some Coryells remained in town and endowed their names to streets and places and special events, even into the 21<sup>st</sup> century, but the number of Coryell offspring and marriages diminished. In spite of these reductions, the greater Coryell family produced at least two judges (John and Lewis), and two mayors emanated from the Coryell lineage through the 1860s. Following some financial reverses (some attributable to the unreimbursed expenses incurred by the Coryells during the Revolution), much of the property owned by various branches of the Coryell family was sold off.

There began an out-migration of Coryells. Cohen cites this as "Coryell Exodus to the West" in 1847. My theory is that the Coryell family movement was similar to the motivation that caused Emanuel to move west from Piscataway to an uninhabited locale to become known as Coryell's Ferry. The opportunities had run out and it was time to go west and north. The spread of the family name throughout the west and north into Ontario (by a branch of the family who were loyalists during the Revolution) is testimony to the urge to move and seek fortunes in new territories. Some established farms in rural Sussex County, NJ, but one branch of the family resettled in the Promised Land in Pike and Wayne counties, PA. Among these was Cornelius Coryell (2) (1770-1862), son of the spy Cornelius (1)(1732-1831). Just exactly when his migration took place is unclear from the records, but it appeared to be near the first quarter of the nineteenth century. We know his

grandson Daniel P. Coryell was born in the Promised Land in 1846, so it appears that the migration would have occurred well before that date.

### The Promise Land Coryells and the D&H Canal:

Cornelius Coryell (2) married twice. His second wife, Kathy Conselius, bore five children: Lewis (who became a judge), Sarah, Nancy, Amelia, and John (2). We are interested in the line through John (1812-1863). Both John and his father Cornelius Coryell are buried in Indian Orchard Cemetery, not too far from Lonesome Lock and bordering the D&H Canal alignment. Also buried there are two successive generations in the line including my grandfather Cornelius (3) (1875-1943), son of Daniel Perry Coryell (1846-1930), the locktender at Lonesome Lock. The burial grounds at Lambertville Presbyterian Church Yard, an area just outside New Hope, and the cemetery at Indian Orchard confirm the lineage and approximate time that "our" branch of the Coryell family migrated to the Promised Land.

We are not clear as to Cornelius' occupation in the Promised Land. We know that he settled in White Mills. We know that his son John was involved in the lumbering industry and that he partnered with a Daniel Parry, another immigrant from Coryells' Ferry (but on the Pennsylvania side). It is possible that Cornelius was similarly employed with his son. Since the peak years for rafting on the Delaware and Lackawaxen rivers was around 1850, it is possible that they were involved in the timber rafting trade, through their timber and sawmill business, yet another form of inland navigation connected to the family. The Coryells made a name for themselves in White Mills. The brook that runs into the Lackawaxen and likely powered the Coryells' sawmill, still exists under the name Coryell Brook. Its headwaters are located on the Syndam Dorflinger estate grounds and glass museum. It descends to the river past the old Dorflinger Glass works building, where my two great aunts Adna and Martha worked part-time. They, however, are not listed among the permanent employees of the glass works.

For a minimally educated (for the day) male, the rural occupational choices were limited in mid-nineteenth century. All the choices were arduous save one. One could become a farmer (physically taxing, long hours), a miner (inside work at constant temperature, but really dirty), a railroad man (long hours, possible loss of limbs or life), or a timber man/cutter (tough work). All were basically unsafe. Then there was the canal as a locktender (eight months of relatively easy work, low pay, but four months of doing one of the above types of work when the canal was seasonally inactive). At some point, Daniel Perry Coryell (1846-1930), son of John (2), became a lock tender on the D&H Canal.

In 1874, Daniel married Nancy Andrews (1853-1924). It seems likely that he would have been working for the canal company at that time. The family has the marriage certificate issued in Texas Township. We know from a glass globe, probably crafted at Dorflinger Glass Works in White Mills, that Daniel was a member of the International Order of Odd Fellows and at least one other fraternal institution. There is no record of family church attendance. The children went to school from Lonesome Lock, but the location of that school is not clear. Probably it was at White Mills.

### The End of the D&H Canal

Although we cannot verify the disposition of the lock house structure, it was common in those times to demolish unused buildings and reassemble them or reuse the components at another location. The D&H Canal Company was no exception to this practice.

The D&H Canal Company sought to dispose of its canal real estate and infrastructure quickly at the conclusion of canal operations in 1898. Several proposals surfaced to turn the towpath into a railroad to compete with the Erie Railroad, which had just completed a line to Honesdale on the opposite bank of the river from Lonesome Lock. Nothing came of this railroad towpath conversion plan except that the portion of the towpath between Summitville and Kingston was purchased by the New York, Ontario and Western RR in 1902.

The far eastern end of the canal was reopened in late 1899 for transporting blue stone and cement and for the construction of what is now known as the NY State Eastern Correctional facility at Napanoch, NY. The canal ran directly through the grounds of this big house. The Cornell/Coykendall (steamboat) interests purchased the canal in its entirety for \$10,000 and had reopened the canal to further their cement-producing

interests in and around Rosendale. This final operating segment of the canal was abandoned in 1901. The O&WRR bought much of the canal towpath between Kerhonkson and Summitville for its Ellenville Kingston extension in 1902.

The canal reservoir lands were also sold quickly, since the D&H Company wanted to concentrate its investments in its railroad, steamboat, trolley, and interurban electric railway enterprises. The Wolf Lake reservoir lands were sold for pennies per acre in 1906. The disposition of the specific Lonesome Lock property has not yet been researched.

### Beginning a New Life after the Canal "Went Up"

The impact of the canal's closing on the economy of the area it serves was dramatic and devastating. It had a major impact on the economy of the Coryell family, or at least on Daniel, since he was employed by the canal company. In November 1898, the last canal boat passed through Lonesome Lock. In December, the directors of the canal company decided that the canal would not reopen. In January, they applied to abandon the canal and permission was granted by May of that year. That was the end of the canal operations, though several ideas as late as 1912 were proposed to reopen the waterway. For Lonesome Lock and the Coryell family it was the final blow. For the eastern remnant in New York, the canal was not quite finished. It carried construction material for the Eastern Correctional facility at Napanoch. The D&H also transported cement from the area of Rosendale in its last days.

The canal itself had been declining in traffic volume, employees, and revenue. Its sources of coal revenue had been drawn away by conventional railroad lines, principally the Erie RR. The new all-rail routes from mine to market were twelve-month operations and avoided the costly transfer of coal from the gravity railroads to the canal boats. There being no work or future in the Promised Land, Daniel packed up his family and headed to New Jersey, where his son Cornelius (my maternal grandfather) had scouted employment opportunities and potential living quarters. Cornelius, "Coneele" for short, also married Mary ("Lillie") Elizabeth Wright, a seamstress and a naturalized American, former Cornish Englishman.

Daniel built a house for the family on Brighton Avenue in Belleville, NJ near the Morris Canal. Two of the four daughters, Mattie and Adna, remained with the family in Belleville and never married. They found employment with the Oaks textile mill in nearby Bloomfield and walked to the mill along the towpath of the Morris Canal. There they labored at the looms for at least forty years. The family has their 40-year pins. Daniel held several blue-collar jobs, among them with the tin mill, once located on the site of the present Branch Brook Park between the Morris Canal and the Second River. "Coneele" and Lillie Coryell had two daughters, Florence May (1902-1980) and Hazel Dell (1904-1979), the former being the author's mother. Coneele also worked at the tin mill, was a streetcar conductor in the days of two-man cars on the Public Service Railway, Mulberry St. Line in Newark and had other jobs requiring his mechanical skills.

Coneele and "Lillie" settled in a house on Brighton Avenue, within sight of the Harrison Street bridge across the Morris Canal in the Soho section of Belleville. Soho is bisected by the canal, of which there is little trace today, except for a mini preserved section a block long east of Harrison Street and across the street from the former Cornelius Coryell residence. Mom related a few stories about her growing up on the canal and living on Brighton Avenue. She learned to swim in the Morris Canal. Girls in this modest blue-collar neighborhood wore house dresses for swimming in this first decade of the twentieth century. Mom said the swimmers would holler "canal boat, canal boat" as a boat came into view. Everybody out of the water! The slow-moving canal boat would stir up the silt on the bottom of the canal, making the pool unfit for swimming until the mud had settled back to the bottom. Then there were the leaches. Knowing that this was a time when the canal was generating very little traffic, the few boats and infrequent locking would not flush the canal of the garbage and other "material" leaching into the canal.

<sup>11</sup>Anderson, Hannah Coryell, General Washington at Coryell's Ferry, booklet

<sup>12</sup>Cohen, Edward, Lambertville's Legacy, the Coryells, Ashbel Welch and Fred Lewis, New Dimension Printing, 1999.

<sup>13</sup>Cohen, Edward *ibid.*

<sup>14</sup>Lee, Warren and Catharine, A Chronology of The Belvedere-Delaware Railroad etc.etc...., Bel Del Enterprises, 1989.

(To be concluded in the spring issue)

# Bridges at Port Orange and Wurtsboro

By Dave Barber

Just north of Port Orange Road in Port Orange, NY, is a gap in the D&H Canal towpath where a stream that has entered the canal on the berm side exits the prism. A group of volunteers led by Cliff Robinson, Jr. has long been working to clear the towpath in this area from the Port Jervis boundary to Westbrookville (to the north) and to build small parking areas at the road crossings. The stream created a gap that couldn't just be filled in.



Unloading bridge members

After getting federal grants for most of the necessary funds, this past spring the group dug pits at each end of the gap and installed abutments made of precast "Stone Strong" concrete pieces. Each abutment was set on compacted gravel and stacked three courses high. After assembly, each abutment was then filled with 3/4-inch crushed stone with the final top holes filled with hand-mixed concrete. The pits outside the abutments were then backfilled with tamped earth.

The actual bridge is made of fiberglass channel and tubing and was designed and prefabricated by E.T. Techtonics in Philadelphia, PA. The bridge is a standard olive green color with squared ends and is 5 feet wide by 66 feet long. The pieces were shipped disassembled on a flatbed truck and unloaded at the site. Then, with the help of some staging in the gap, they were assembled by volunteers. Assembly was basically wrench work with some jacking on the staging for alignment. After assembly of the fiberglass components, the pine decking was installed. Total project cost including abutments, freight, bridge components, engineering, and permits was about \$50,000.



View across the abutments and staging before bridge installation

Abutment being assembled



The group is continuing with towpath and parking lot work and has plans for another two, thirty-foot fiberglass bridges across other gaps.

In learning about this project, I also learned about an earlier project with a bridge over Youghousekill (Willey Brook) on the northeast edge of Wurtsboro. This earlier bridge is about 65' long, made of steel by Echo Bridge in Elmira, NY. It was installed about 2003 with grants from New York State.

The fiberglass bridge photos are by various members of the volunteer group.

(more photos on the next page)



▲ Lower bridge channels installed



▲ Cross bracing and cross channels installed

Volunteers completing fiberglass construction ▼



▼ Completed bridge



## CANALING THROUGH OHIO'S CUYAHOGA VALLEY

Story and photos by Bruce J. Russell

The valley of the Cuyahoga River, which begins six miles south of Cleveland and extends farther south almost to Akron, a distance of about 25 miles, is one of Ohio's premier tourist attractions and has a special appeal to canal enthusiasts.

Here is situated the northernmost portion of the Ohio & Erie Canal, a 308-mile-long waterway connecting the Ohio River at Portsmouth with Lake Erie at Cleveland. It was constructed in stages between 1825 and 1832, and until its eclipse by railroads in the 1890s, provided an economical means of transportation along a north-south axis. Formal abandonment didn't occur until 1913 when the decision was made not to repair major flood damage. Today only sections remain as a reminder of the Buckeye State's great canal age.

At its peak in the late 1860s, there were approximately 1,000 miles of inland waterways in Ohio, and initially both passengers and freight were carried from one town to another aboard wooden, animal-pulled boats at a speed no greater than five miles per hour. The most important of these manmade waterways were the two that connected the Ohio River, over which flat-bottomed, steam-powered riverboats traveled, and Lake Erie, where larger steamboats of a different design gave access to numerous ports in the Great Lakes region. The most important was the aforementioned Ohio & Erie Canal, which, in addition to its mainline, also had several branches, including two that extended into Pennsylvania with connections to that state's canal network. These were the Pennsylvania & Ohio and the Sandy & Beaver canals. The other major Ohio canal, located in the western part of the state, was the slightly shorter, 301-mile-long Miami & Erie, which began in Cincinnati and ran north to Toledo, like Cleveland an important Lake Erie port. In common with New York, New Jersey, Pennsylvania, and Indiana, Ohio has an active canal society, founded in 1971. Every year it sponsors field trips to various sites along the surviving portions of the Ohio canal network.

Between the late 1700s and 1803, when it was admitted to the Union, Ohio was known as the Western Reserve and

later as the Ohio Territory. White settlers began arriving in the area between present-day Cleveland and Akron in 1795 and slowly pushed the Native Americans farther west. The majority of these newcomers, mainly from New England and New York State, took up farming. It was necessary to get their crops and livestock to market in towns along the Atlantic coast. This required first transporting products to ports on the Ohio River or on Lake Erie, where steamboats could ship the goods. In the early 1800s, roads were primitive and using wagons to move farm products was time-consuming and costly.

Consequently, Ohio initiated a program of canal construction, modeled on that of New York State and Pennsylvania. Initially, Ohio's canals were 40 feet wide and four feet deep. James Geddes and Canvass White, both of whom had done engineering work on the Erie Canal, were hired by Ohio's canal commissioners to design an inland waterway connecting Lake Erie with the Ohio River. Groundbreaking occurred on July 4, 1825 at Cuyahoga Falls, near Akron, which would be the summit of the Ohio & Erie Canal. During this same year, work began on other internal improvements, including New Jersey's Morris Canal and New York State's Delaware & Hudson.

Building the Ohio & Erie was relatively easy because most of Ohio is flat and lacks wide rivers that have to be crossed by expensive aqueducts. Nevertheless the canal required 146 lift locks. The job of excavating the channel and constructing the lock chambers was awarded to several contractors, most politically connected. These in turn hired immigrants, often recently arrived Irish, to perform the actual labor. This was done with stump pullers, wheel barrows, and picks and shovels. Luckily, hydraulic cement, which slowly hardens underwater and lasts indefinitely, had been invented by Canvass White and was used for lock chambers, whose stone blocks came from local quarries.

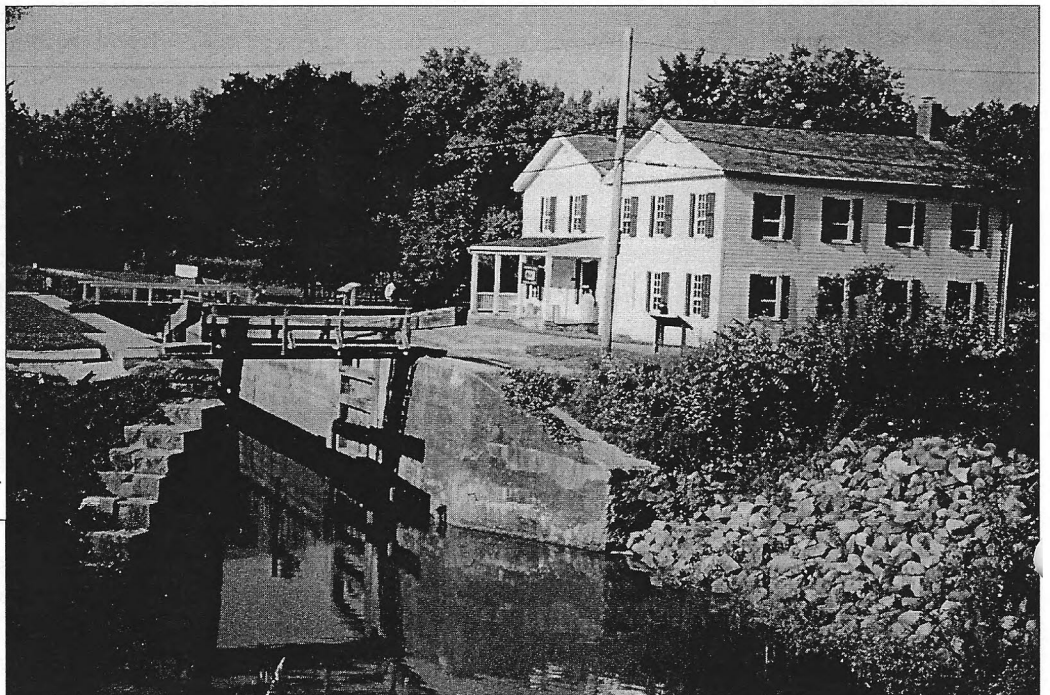
The locks were numbered in both directions from the Akron summit, with Lock 44 north located at the junction of the canal and the Cuyahoga River, a few miles south of Cleveland. From here the boats were towed by steam tugs to Lake Erie. Local carpenters fashioned lock gates and the homes of the locktenders; some of these structures are still standing.

A system of reservoirs to supply water to the canal's summit level. When the entire Ohio & Erie opened in 1832, it ushered in a wave of prosperity. Farmers could now get their crops to market cheaply and easily, factories could obtain coal for their boilers, and many jobs were created in boat-building yards. Although canal transport was slow, it was faster and less expensive than using wagons on dirt roads. The only drawback was that the canal was useless during the winter months because of freezing.

Like most 19th-century towpath canals, the Ohio & Erie survived into the early years of the 20th century, carrying declining amounts of freight. During its first two decades, passengers were carried in packet boats, many obtained second-hand from the Erie Canal. After Cleveland and Akron were connected by railroad in the late 1840s, these colorful vessels disappeared. The freight business, however, remained steady and reached its greatest volume in the late 1860s; it then declined precipitously. Nevertheless, freight boats continued to supply canal-side industries, and the canal itself brought water to many towns along its route.

In 1905 the State of Ohio decided that its towpath canals were worth keeping. The state spent considerable money dredging the waterways and rehabilitating lock chambers. Unfortunately, by 1912 only a few vessels were still using the canals. A disastrous flood in 1913 resulted in enormous damage to the Ohio & Erie Canal. The state decided not to undertake costly repairs, and the waterway was abandoned. During

this same period, most of Ohio's other manmade waterways were also closed for good. Water was permanently drained, portions filled in, lock chambers dismantled, and the stone blocks sold. Luckily, an excellent pictorial record exists in black-and-white. Surviving remnants exist between Cleveland and Portsmouth; in most cases these are protected from further destruction and clearly marked by plaques installed by the Canal Society of



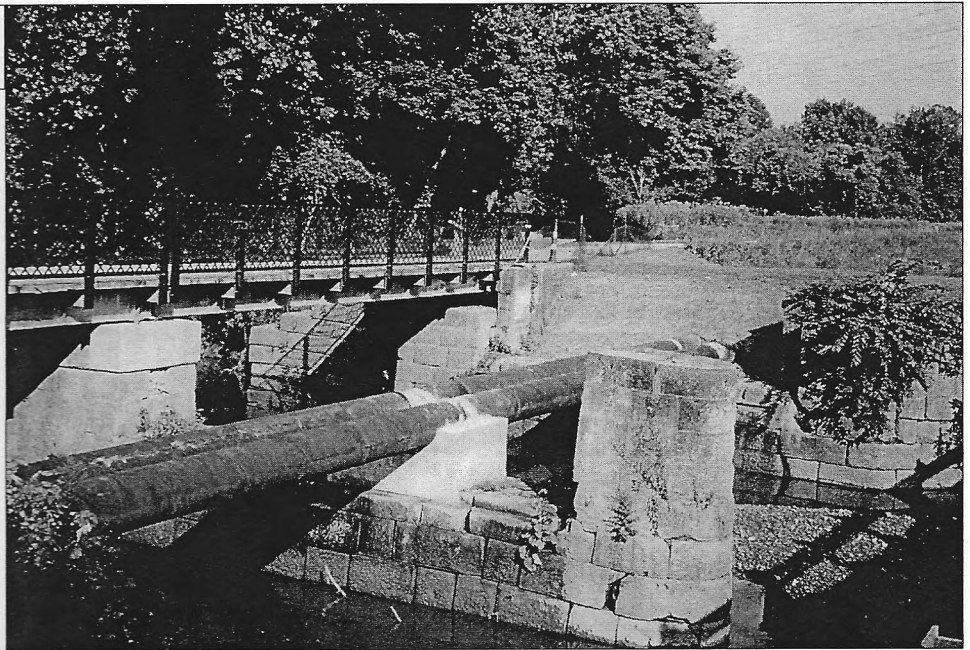
Visitor center at Independence, next to the fully restored Twelve Mile Lock. The center consists of a locktender's house and a former canal-side store.



Two metal pipes over Tinker Creek maintain a continuous flow of water.

Ohio and other historically oriented groups.

During the summer of 2008, I visited the 110-mile-long section between Independence, five miles south of Cleveland, and New Philadelphia; this is now known as the Canal Heritage Corridor. Although parts of the waterway exist as far south as Portsmouth, where the outlet lock into the Ohio River remains intact, I knew there was much to see in the northern portion. This contains the Cuyahoga Valley National Park, a 25-mile-long narrow band paralleling the Cuyahoga River. The park, originally called the Cuyahoga Valley National Heritage Area, was created in the 1970s to save



land from suburban development. Its main attractions are a watered section of the canal with a working lock, a canal museum and visitor center, and a scenic railroad offering several round trips a day between Independence and Akron, with some trains going farther south to Canton. Although the national park ends at Cuyahoga Falls, the Canal Heritage Corridor continues to New Philadelphia and includes the restored canal village of Fulton.

My exploration of the Ohio & Erie Canal began at Independence, where the Cuyahoga Scenic Railroad begins its journey south over tracks once belonging to the Baltimore & Ohio Railroad. It was the completion of this line that drove the first nail into the canal's coffin. The section of the canal north of Independence appears to be intact, but low bridges preclude the possibility of any kind of navigation except by canoe. I drove along this unattractive, semi-industrial area for a couple of miles and then returned to Independence. Here I walked along the towpath for about a mile, noting that it was filled with water and looked as it must have when in regular use. I then proceeded south to the visitor center, next to Twelve Mile Lock. This fully restored, operating lock is so named because it's exactly twelve miles south of Lake Erie. The center consists of two wooden buildings: a locktender's house and a former canalside store. Inside are excellent quality photos showing vessels passing through the adjacent lock, whose stone walls are covered with a layer of concrete installed during the 1905 modernization. A model shows how a lock works. Although I could have stayed to see a demonstration of the lock outside, I continued driving south, paralleling the canal.

In two miles I reached the Tinker Creek Aqueduct, or the site of it. The original 40-foot-long wooden trough had deteriorated beyond the point of repair and a replacement had been authorized. To maintain a continuous flow of water over Tinker Creek, two metal pipes had been placed into position. During the Canal Era, such maintenance work was performed during the winter months, when the prism had been drained, permitting full access. Continuing farther, I arrived at Brecksville, where the train had stopped at the quaint, wooden station. What's interesting here is the Pinery Dam, a manmade barrier stretching across the Cuyahoga River, creating an artificial lake. From this lake, a quarter-mile-long feeder canal joins the lake, and brings water into the canal. By opening and closing a control gate, the amount of water in the canal can be regulated.

My next stop was the small town of Peninsula, a restored, 19th-century village and tourist mecca, where a number of canal structures still exist. A short walk from the B&O station brought me to the remains of the stone aqueduct that once carried the canal over the Cuyahoga River. Built between 1826 and 1827, it required the chiseling of stone blocks from a nearby quarry and the transportation of them in horse-drawn wagons to the construction site. Its wooden trough is missing, but the stone abutments are in perfect condition. Alongside is a modern pedestrian bridge. Directly in front of the northern abutment is Lock 29, also known as Peninsula Lock, which raised boats to the level of the aqueduct. Why this elevation of the aqueduct was necessary remains a mystery to me. One explanation is that it permitted sufficient clearance for vessels passing below on the river, which may have been navigable at this location. Lock 29 is in excellent condition, and it's possible to walk inside of it and admire the fine work of the masons who constructed its stone block walls.

One-quarter north is Lock 28, also called Deep Lock because its lift of 14 feet is one of the greatest on the whole canal. Unlike Lock 29, this lock chamber was covered by a layer of concrete during the 1905 modernization, but in places it's crumbling, revealing the original masonry. Because the difference in elevation between Akron (which means



The *St. Helena III* is a ferro-concrete boat that operates in Canal Fulton, Ohio.

“highest point” in Greek) and Lake Erie is 400 feet, locks having this amount of lift are necessary.

By walking farther north along the towpath, I reached the quarry that supplied stone for these and other locks. A series of pictures at the site showed the quarry in operation, as well as workers using saws and chisels to shape the individual blocks. Many of these blocks retain the holes used by lifting hooks and calipers to place them into position. Prior to the coming of the railroads, the construction of canals was considered a vital enterprise and attracted people with a background in engineering and construction. In many

respects, it’s unfortunate that the Canal Era was so brief and that so little of the thousands of miles that once existed survives in a navigable state.

Returning to my car, I continued toward Akron. Arriving in the Rubber City, so called because both Firestone and Goodyear once had factories there, I visited Lock 2 Park. Situated in downtown Akron, the park consists of a completely rebuilt lock chamber and a short re-watered section of canal. Here, during the 1870s, there was a dry dock and a boatyard that produced at least 150 vessels. The lock in this park was dedicated on October 26, 1983 and represents the efforts of many historically minded people, including members of the Canal Society of Ohio. I spent considerable time here, reading all of the plaques that give the background of the lock and a short history of Ohio canals. Until the close of the 19th century, Akron hosted much canal-related activity. In spite of the creation of the canal park, downtown Akron isn’t doing particularly well; many retail businesses have relocated to outlying malls. Nevertheless, there are many interesting old buildings, some dating from the Canal Era.

The next day I drove farther south, stopping first at the Portage Lakes State Park. Several lakes exist here, both natural and manmade; the latter were created during the 1820s by the builders of the Ohio & Erie Canal. They built dams across small streams, causing water to back up and create lakes, whose water was then channeled to the canal. This method of supplying water to canals was widely used, and in my home state of New Jersey, Lake Hopatcong is a prime example. Its purpose was to furnish water to the Morris Canal. I remained at the park for about an hour, searching for some of the feeder canals, but was unsuccessful in locating any. From my research, I discovered that after the canal closed in 1913, these lakes were sold to local people for recreational use.

Continuing south, I arrived at the small town of Canal Fulton, where a two-mile section of the canal has been restored to its 1870s appearance. I spent time exploring the town, admiring its restored late-19th-century architecture. The main street features many two- and three-story structures with stores on the ground level and living quarters above. I’m certain that the original residents either traveled or worked on the canal and that canal boat captains obtained supplies here. In a few ways, Canal Fulton’s historic district reminded me of Waterloo Village on the Morris Canal or the Erie Canal Village near Rome, NY.

I returned to the canal as the horse-drawn boat, the *St. Helena III*, was being readied for its first trip of the day. It’s a replica freight boat, modified to carry passengers. At the visitor center I learned that President James A. Garfield worked as a canal hand during his youth, but quit after a year (and after many falls into the canal) and enrolled in law school.

While the horses were being walked into position, one of the deck hands told me that the *St. Helena III* is the third vessel to be used at Canal Fulton. The previous boat, *St. Helena II*, was built in the 1970s and now sits on land. The new vessel, made of ferro-concrete, requires little maintenance. Loaded with fifty passengers, she moved at about five miles per hour. For me, traveling on the *St. Helena III* was as authentic a towpath canal experience as one can get in the 21st century. I thought to myself that this is how it must have been in the 1870s, not for a short, one-hour ride, but for an entire dawn-to-dusk journey. As a canal buff, I sometimes romanticize life on the waterways, but I realize that it wasn’t a particularly pleasurable way of earning a living.

After gliding along for about thirty minutes, we reached Lock 4 South (south of Akron). Although the lock is fully restored, we did not pass through it and continue for another mile. Instead, the *St. Helena III* reversed in the turning ba-

sin and returned to the dock, passing the dry dock where it spends the winter.

I realized that there was much more to see along the route of the Ohio & Erie Canal, including the restored Canal Era village of Roscoe, near Coshocton, where the *Monticello II* offers short trips on another re-watered section. At Walhonding, situated on a short branch canal, is an aqueduct and a set of triple locks in perfect condition. And at Portsmouth are the locks joining the canal with the Ohio River. I would like to see all of these sites and perhaps someday I will. But on this visit to the Buckeye State, I accomplished a great deal. In addition to exploring historic waterways, I also made a round trip on the Cuyahoga Valley Scenic Railroad, which parallels the Ohio & Erie Canal and which uses vintages locomotives and coaches. As a transportation enthusiast, I view America's 19th-century canals as precursors to its railroads. I'm sorry that more have not been preserved in a manner similar to those in England and Canada.

## CANALENDER

**February 9** - Winter Meeting, Middlesex Canal Association, 71 Faulkner St, N. Billerica, MA; 978-670-2740. Speaker TBA.

**March 1** - Canal Society of NY State Winter Symposium, Rochester, NY. [www.newyorkcanals.org](http://www.newyorkcanals.org).

**March 1** - Society for Industrial Archeology, New England Chapters Annual Conference. Plymouth State College, Plymouth NH, 9 a.m. Research papers describing America's industrial past. [www.sia-web.org/chapters/nneec/](http://www.sia-web.org/chapters/nneec/) and [www.ecom-venture.com/snecsia/snecindex.html](http://www.ecom-venture.com/snecsia/snecindex.html)

**April 5** - Middlesex Canal Association's Spring Bike Tour. Middlesex Canal Association's Spring bicycle tour. Meet 9:30 at North Station (commuter rail) and take our bicycles on the 10a.m. train to Lowell. Riders meeting the group at Lowell meet at the train station at 10:40. This year an early group will take the 8:00 a.m. train from North Station to allow more time in Lowell and breakfast at the historic Owl Diner (<http://www.owldiner.com/>), aka the Four Sisters). Route visits the Pawtucket and other Lowell canals, the river walk, Francis Gate, and then Middlesex Canal remnants in Chelmsford. Lunch at Route 3A mini-mall in Billerica. Quick visit to Canal Museum, then on to Boston. A long day of exploration (35 miles end-to-end) but sunset is late. (Riders can board northbound trains at other stations or catch southbound trains at 1:07 or 3:14PM to return to Boston early. Complete Lowell line schedules can

be downloaded at <http://www.mbcn.net>) Participants are responsible for one-way train fare [\$6.75 from Boston to Lowell]. For changes or updates, see <http://middlesexcanal.org>. Leaders Bill Kuttner (617-241-9383) & Dick Bauer (857-540-6293).

**April 27** - Joint Middlesex Canal Association/Appalachian Mountain Club Spring Walk, Meet at the Sandy Beach parking lot off the Mystic Valley Parkway by the Upper Mystic Lakes in Winchester. The walk will follow the route of the Middlesex Canal through parts of Medford and Winchester. Sites include the aqueduct and mooring basin, those segments of the canal bed and berm visible off the parkway, and the stone wall of the Governor Brooks estate, in Medford. For more information, contact Robert Winters 617-661-9230 or Roger Hagopian 781-861-7868.

**Apr 25-27** - Joint Pennsylvania Canal Society and Canal Society of Ohio spring tour of the Ohio and Erie Canal, tour to be based in Akron, OH. ACS Directors will meet during this weekend. Larry Turner, [towpathturner@aol.com](mailto:towpathturner@aol.com). For more information, see [www.pacanalsociety.org/](http://www.pacanalsociety.org/), [www.canalsocietyohio.org/](http://www.canalsocietyohio.org/) and [www.americancanals.org/](http://www.americancanals.org/).

**April 25-27** Virginia Canal and Navigations Society Annual Conference at Glen Maury Park, Buena Vista, VA.

**April 28** - Spring Middlesex Canal walk, Winchester to Medford, 1:30.

**May 2-4, 2014** - Canal Society of NY State spring tour, will explore the Chesapeake & Ohio Canal; Headquarters: Hagerstown MD. [www.newyorkcanals.org](http://www.newyorkcanals.org).

**May 4** - Middlesex Canal Association Spring Meeting will be held in the museum, beginning at 1 PM. Speaker TBD. Refreshments will be served. 71 Faulkner St, N. Billerica, MA; 978-670-2740.

**May 10** - NJ State History Fair. Canal boat ride; canal troubadour Roy Justice; vendors; historic groups. Washington Crossing State Park; 609-777-0238

**May 31-June 4, 2014** - Canal Society of Indiana Erie Canal cruise, June 2-4, with extra tours of Buffalo after the cruise. Contact the Schmidts at [indcanal@aol.com](mailto:indcanal@aol.com).

**June 28** - Waterloo Canal Day on the Morris Canal. Canal Society of New Jersey, [www.canalsocietynj.org](http://www.canalsocietynj.org). Boat rides, crafts, tours. Bob Barth, [bbarth@att.net](mailto:bbarth@att.net); 201-401-3121.

**July 29, 2014** - 100th Anniversary of the Cape Cod Canal, MA

**August 16** - Wharton (NJ) Canal Day. Boat rides, crafters, vendors, tours. John Manna, 973-989-0237.

**September 1-4, 2014** - 2014 World Canals Conference, Navigli Lombardi, Milan, Italy

**September 12-14** - Canal Society of Indiana Fall Tour in the Fort Wayne, IN area, Wabash & Erie Canal.

**September 21-23** - Canal Society of New York State Conference, Geneva. [www.newyorkcanals.org](http://www.newyorkcanals.org)

**THE RAGING CANAL: NEWSPAPER ACCOUNTS OF  
THE DELAWARE AND HUDSON CANAL, 1870-1902**

by Audrey Graybill and Barbara Briden -- Reviewed by Peter Becker

The latest book produced by the Wallenpauack Historical Society, *The Raging Canal*, republishes newspaper articles from the 19th century that concerned the Delaware & Hudson (D&H) Canal. *The Raging Canal* was brought together and edited by Audrey Graybill, past president of the society, and richly illustrated by water color artist Barbara Briden. The book also contains vintage photographs of the canal operation.

A wealth of detail is found in this 277-page book, tidbits of daily life on the canal, revealing glimpses of the lives of people who worked on the waterway or were impacted by it, as well as its operations, dreams, and trials faced by its backers. Information found in these aged accounts offers snapshots from the time, as described through a reporter's pen. Unlike a historian reaching back in time trying to unearth the facts, faced with gaps of knowledge and separating what is known from fable, these accounts were fresh news and everyday experience when they were first printed. It is also full of editorial comment. Here are just a few items extracted from *The Raging Canal*.

- Honesdale Citizen, November 2, 1876 -- "A heavy business in cabbages is being done by the Del & Hud Canal boatmen. They bring into port some fine cabbages from 'down the line.'"
- Honesdale Citizen, May 2, 1878 -- "Hawley items: The Pioneer is making four regular trips each week, but it is no very largely patronized these hard times; most people preferring to ride on the coal cars as long as they can ride free."
- Wayne Independent, March 20, 1897 -- "The boating season will open about the 1st of April. Fifty captains have been notified that their boats will no longer be needed. Thirty of the best boats out of the 150 taken off two years ago will be allowed to operate this season. Boatmen will receive 70 cents on coal."

Covering the period of 1870 through 1902, the book extracts stories and briefs found in local newspapers from the era, copies of which are now either brittle and yellowed, salvaged on micro-fiche or missing altogether. They came from the Wayne Citizen and Honesdale Citizen, predecessors to The News Eagle; The Wayne Independent and Wayne County Herald.

Graybill's work was inspired from the efforts of a librarian, Dorothy Hurlbut Sanderson of Ellenville, New York, who in 1927 compiled these newspaper articles for a book she planned to write. Sanderson published some of the material in a book in 1963. The present work, however, has many differences, Briden stated. The D&H Canal, the first million dollar private enterprise in the United States, operated between 1828 and 1898, connecting Honesdale, through Hawley and Lackawaxen, PA; Port Jervis, Ellenville and ending at Rondout (Kingston), NY on the Hudson. Separate gravity rail systems ferried the mined coal to Honesdale and Hawley for the waiting canal boats.

*The Raging Canal* also has a generous index, allowing researchers a chance to mine items of particular interest and obtain a clearer picture of life on the D&H Canal and its patron towns, an era that helped form the bedrock on which our present has been laid.

This is Audrey's fourth book. The Paupack native also has compiled a history of the Gumble family; *Historic Homes of Palmyra Township* and *The Hawley Flood of 1942*.

The book is available from the Wallenpauack Historical Society, PO Box 345, Paupack, PA 18451-0345 for \$18.86 plus 6% PA tax (\$20.00) and \$5.00 S&H. See [www.wallenpauackhistorical.org/PublicationData/Raging%20Canal.htm](http://www.wallenpauackhistorical.org/PublicationData/Raging%20Canal.htm) for more information on the book, and for ordering information, visit [www.wallenpauackhistorical.org/PublicationsPage.htm](http://www.wallenpauackhistorical.org/PublicationsPage.htm).

