AMERICAN CANALS

BULLETIN OF THE AMERICAN CANAL SOCIETY

Vol. XXXIII, No. 2

Dedicated to Historic Canal Research, Preservation, and Parks

Spring 2004

THE WILLAMETTE FALLS CANAL

by Alan G. Lewis

Introduction

The Willamette River flows 294 miles from its source in southern Oregon north to the Columbia River at Portland. It is one of the few rivers in the world that flows south to north. For centuries the river has provided the main means of transportation in western Oregon. The arrival of settlers coming to claim free land and a few years later the introduction of steamboats to the Northwest sparked the beginning of a water transportation system that though much diminished still exists.

By the early 1850's agriculture and timber products from farms and industries along the Willamette River Valley were being carried by steamer to Portland for shipment to world markets. However, seventeen miles upstream from Portland stood the 40 foot high horseshoe shaped Willamette Falls (located at the towns of Oregon City on the east bank and West Linn on the west) requiring portaging of freight and passengers.

Early Solutions

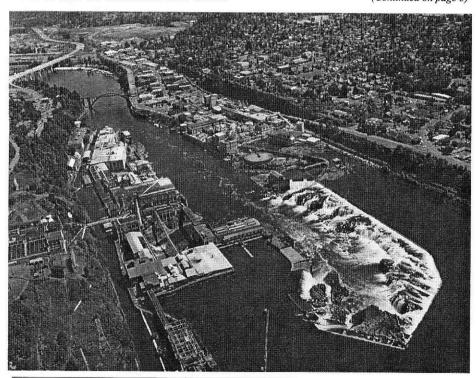
Originally only a crude trail connected the two levels of the river and portaging was slow and expensive. Hoisting entire boats and their cargos over the falls was tried but was no improvement. Eventually, to speed the transfer of freight and passengers, a breakwater was built on the east upriver side of the falls. This created a 60 foot wide basin extending to the end of the east flank of the horseshoe. The result was that boats in the upper river could dock at the end of the basin and, by using a water powered inclined elevator for freight and an inclined stairway for passengers, off load directly to boats docked in the lower river. The basin, built in 1865, gave its owners, the Peoples Transportation Company, complete control of the movement of freight and passengers past the falls.

The Canal is Built

In 1868 with the increase in river traffic

and in an effort to reduce freight rates by ending the Peoples Transportation Company's monopoly, a group of local businessmen formed the Willamette Falls Canal and Locks Company to provide a canal around the falls. With private and state funds, a canal costing \$600,000 was built along the west bank of the river. Length of the canal, including upper and lower guides, was 2,772 feet. The canal consisted of a guard lock, four lift locks each with a lift of 10 feet, and a 1,272 foot long

(Continued on page 3)



Aerial photo looking north (downstream). In the right foreground is Willamette Falls (considering the low flow, this photo was obviously taken in the summer). The "crisp" lip of the falls is due to a concrete dam build around the edge to increase the fall of water for the benefit of the hydro-electric plant (one of the buildings at the left of the photo). The canal can be seen running between the buildings and the west bank. The majority of the buildings on the left are part of the West Linn Paper Company; the only exception is the hydro-plant noted above. The buildings on the right (east) side of the river are another paper mill. The city on the right is Oregon City; the one on the left is West Linn.

Photo courtesy of the U.S. Army Corps of Engineers.

American Canals

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societies:

The objectives of the American Canal Society are to encourage the preservation, restoration, interpretation, and use of the historical navigational canals of the Americas; to save threatened canals; and to provide an exchange of canal information. Manuscripts and other correspondence consistent with these objectives are welcome.

An annual subscription to *American Canals* is automatic with ACS membership. Annual dues: \$20. Single copies, \$3. Four issues per year.

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Other Publications: The Best from American Canals; American Canal Guides, William E. Trout III, editor and publisher

DEADLINE: Material for our next issue must be on the editor's desk no later than August 15, 2004. Send to Paul Bartczak, 9954 New Oregon Road, Eden, New York 14057; PJBartczak@earthlink.net

Material submitted to AMERICAN

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(Continued from page 1) canal basin. Each lock was 40 feet. wide by 210 feet. long. As originally built, the canal had an over the sill depth of three feet. It opened on January 1,1873 and has been operating continuously ever since.

Early Consequences

The immediate result of opening the canal was a 50 percent drop in freight rates. Furthermore, the Willamette Transportation Company (which in

1871 had bought out the Peoples Transportation Company) lost its control of the river.

The Canal Matures

Ownership of the canal passed through many private hands until, in 1915, it was sold to the federal government for \$350,000. The U.S. Army Corps of Engineers was charged with operation and maintenance, and all tolls were eliminated. By 1880 the steamboats were losing both freight and passenger

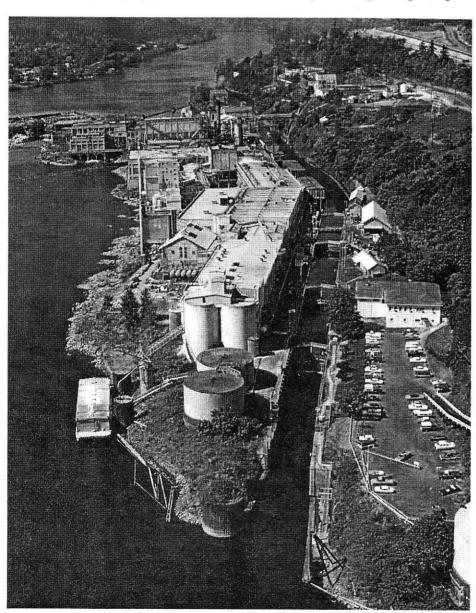
business to the railroads, but they didn't disappear until well into the 20th century.

The passing of the steamboat age didn't mean the end of usefulness for the canal. Since 1889 there had been a paper mill on the west side of the river adjacent to the canal. From its earliest days the mill had used canal barges to bring in raw materials and take out finished product. At the same time logs were being brought in through the canal to be ground into pulp for the paper making process. In 1991 the mill discontinued making grades of paper that required groundwood pulp and the logs stopped coming. The second factor in the reduction of commercial use of the canal was the reality that trucking was less expensive than barging. In 1997 the paper mill was sold and the new owners changed from barges to trucks. This resulted in the dominant use of the canal changing from commercial traffic to pleasure craft. In 2001, due to the reduced commercial traffic, the Corps began limiting canal operation to the spring and summer months (mid April through September) with lockage during the rest of the year available with 48 hour notice.

Over the years the Corps has made numerous improvements to the canal. The depth of the lock chambers was increased to six feet over the sills, and hydraulics eventually replaced manpower in operating the chamber gates and wickets. In addition the butterfly wickets (four in each gate leaf) were changed to vertical sliding gates. It originally took 14 workers to operate the canal, but today it takes just two. Lockage time is 45 minutes upstream and 30 minutes downstream

Other

Famous cargos that have passed through the canal include the Willamette Meteorite, the largest ever found in the U.S. and the sixth largest ever found in the world. It was discovered in 1902, 2 ½ miles from the canal. (Experts believe that the meteorite came to earth in what is now Montana, and was brought down 12,000 to 15,000 years ago on the Bretz Glacial Floods). The Hughes HK-1 Flying Boat, better known as the "Spruce"



Aerial photo looking south (upstream). A bit of the falls can be seen in the extreme upper left of the photo. The lower entry to the canal is at the right center (the outer doors of chamber #1 are open). The structure crossing the canal in the center of chamber #4 is a lift bridge. (The paper mill is on an island formed when the canal was cut through. The only access to the island is this lift bridge.)

Photo courtesy of the U.S. Army Corps of Engineers.

Goose", locked through in 1992 on its way from Long Beach, CA to its new home in McMinnville, OR.

The Willamette Falls Canal was placed on the National Register of Historic Places in 1974, and was designated as a State Historic Civil Engineering Landmark by the American Society of Civil Engineers in 1991.

Today the canal is an integral part of the local history that has grown around the falls. Oregon history is taught in the fourth grade, and the canal and falls area are a popular destination for school children from around the state.

In 1989 a new Lockmaster's Office was built and the old one turned into a museum. It of course has photos, displays and narrative regarding the history of the canal, but it also includes historic information on the paper mill, a fish ladder at the falls and a hydroelectric generating plant built adjacent to the canal in 1895 and still in commercial operation.

The Future

We have been informed that the FY 2005 operating budget for the canal is zero. Local interest groups including commercial users, watercraft and fishing enthusiasts, history, education, preservation and tourism organizations and local governments are joining in a campaign to encourage Oregon's congressional delegation to help in getting funding reinstated.

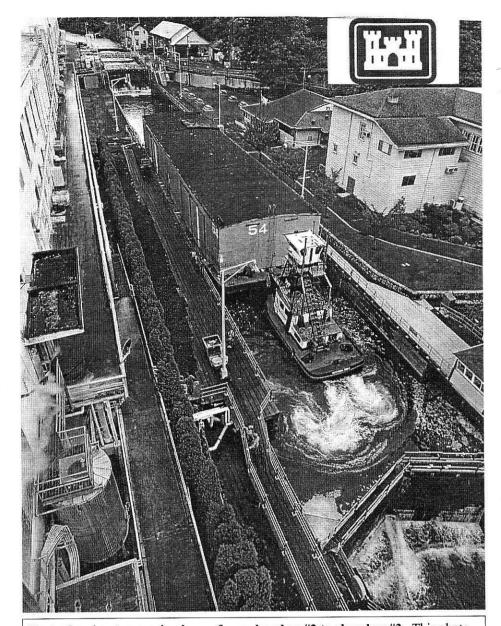


Photo showing tug moving barge from chamber #2 to chamber #3. This photo was taken when the paper mill was still using barges for moving materials. The large building on the right is the mill administration building. The small, low building beyond it is the Lockmaster's Office built in 1989. On the left is the mill.

Photograph by Michael McDermott.



LEFT: Profile of the canal. Diagram courtesy of the U.S. Army Corps of Engineers.



FROM THE PRESIDENT

by David G. Barber

Navvies is the newsletter of the Waterways Recovery Group in England. Its title comes from the nickname of the workers (navigators) who built the canals of England. Today, the name refers to the many volunteers who spend their weekends and vacations restoring canals.

In Navvies # 198 (April - May 2003), I was surprised to read about the Ohio and Erie Canal as a possible restoration project. In England, restoration means to navigable use by privately owned powered craft. The author had written the article entirely from internet sources. I think the article well illustrates the differences in vision across the Atlantic and why visitors from England wonder what our problem is.

In saying this, I do not want to disparage the many hard working folks who have been and are continuing to be successful in protecting our canal remains and developing parks and trails along them. The increasing parks, rewaterings, replica boats, heritage corridor, and bike trails along the Ohio and Erie and other canals are a great example of what can be done. I celebrate these successes. But, I think our goal should be higher.

The O & E ran for 309 miles from Portsmouth on the Ohio River to Cleveland on Lake Erie. The exact distance appears to be disputed. It was one of six canals to connect the tributaries of the Mississippi River to the Great Lakes. Today, only one of those connections, the Illinois Waterway, survives in an upgraded version. But the O & E also connected with the Muskingum River at Dresden via a side cut and three preserved locks, reducing the gap from river system to lake to 151 miles. Dresden is the home of Longaberger Baskets and a tourist destination.

The Muskingum River was canalized by the state during the canal era. Later, the system was federalized, but has now been returned to state control. Over the past several years, the state of Ohio has been restoring the ten locks. When completed, this will restore the navigation up through Lock 11 to Dresden. Lock 1 was made unnecessary by improvements on the Ohio River. Lock 11 at Ellis appears to be operable, but the channel above is not marked. It is surrounded by a small park as are all of the locks. A boat ramp just below the lock provides boat access downstream. The dam at Ellis is also intact.

However, the Muskingum has some problems. The ongoing rebuilding of locks interrupts the navigation at each site for as long as a year. For economy reasons, the locks are only open on weekends and holidays making it impossible to make a round trip in a few days. Thus no one is going to take a vacation cruise up the river or go into business renting boats for visitors to cruise. Many boaters fear the shallows of the river. The navigation is little publicized though very beautiful and the navigation itself is a dead end.

Returning to the canal; unfortunately, the redevelopment craze and highway building in the 1960's destroyed Locks 4 north through 9 north in downtown Akron, but that wouldn't faze the British. The Farmer's Bridge flight of locks in Birmingham passes under several buildings and viaducts. Southwest of Newcomerstown, Ohio Route 16 was built on the towpath and crowds the prism. Various towns filled in the prism within their boundaries. In other areas, the state went on a land disposal binge and sold off long pieces.

We should note the excellent progress that has already been made along the canal corridor and that the entire nine mile Akron summit level is watered from Lock 1 south at Barberton to Lock 3 north in downtown Akron with a bike path on the towpath for much of the length. We should observe that Akron's minor league baseball park next to Lock 2 north is called Canal Park showing official interest in the canal. Water still flows through gateless Lock 3 north (which has a new outdoor concert stage next to it), under the entrance lobby of the historic Civic Theatre, and down the Cascade Locks despite occasional contamination by storm surge sewage. It interesting that the canal also is watered in the Cuyahoga National Park from Pinery Dam past Lock

40 north (about 9-1/2 miles), close to navigable water on the Cuyahoga River just south of Cleveland. North of the watered section, the overgrown prism extends further north. Also, I note that the next 8-1/2 miles south of Pinery Dam could be easily rewatered using the feeder just north of Peninsula. The route north of Akron is now protected by county and national parks with the towpath used for a bike trail.

While continuous water south of Akron stops at Barberton, much of the route south of Barberton is intact and being developed as a towpath trail. Just south of Barberton is a reportedly intact, four span, concrete aqueduct (the only one built in Ohio). While the stream that flowed under the aqueduct has been cut through the canal a little north of the aqueduct where a feeder used to be, that situation could be corrected. Watered canal extends from north of Clinton to south of Canal Fulton, and intact canal apparently continues on to Massillon. The total distance from Akron to Massillon is about 26 miles. While the canal is filled-in in Massillon and Navarre, it is intact between these towns and south of Navarre. I suspect that all the towns along the route could use economic stimulation.

An overgrown but intact section of canal with clear towpath extends from north of Bolivar to south of Zoar with only one filled interstate highway and one local highway crossing. Interestingly, when I-77 was built past the east side of Bolivar, the river was diverted eastward into new channels at two spots preserving parts of the canal channel along the west side of the highway. I suspect that there is even more intact canal out in the weeds both north of Bolivar and south of Zoar that I wasn't able to observe on my brief visits. Lock 4 south in Canal Fulton, Lock 2 north in Akron, and Lock 38 north at the national park visitor center are all restored and gated. Complete engineering drawings of the canal are also available on the internet.

This is not intended to neglect the canal south of Dresden, I am just less informed about it.

Restoration of 151 miles of canal is a (Continued on page 18)

HAPPENINGS ALONG THE MORRIS CANAL

by Myra Snook

In 1981 the Board of Chosen Freeholders of Warren County, New Jersey made the Morris Canal a part of the County's open space plan and established the Morris Canal Committee as a special committee of the County Planning Board. Since then, Warren County has become a leader in the protection of the remnants of the Morris Canal and an active partner by promoting a greenway corridor and preserving the historic remains of the canal as an important part of the county's transportation history.

The vision is to have this greenway extend across Warren County with the canal as a link to recreational, cultural, and historic areas including state parks and trails, plus municipal and county public open space. This greenway will extend between the proposed New Jersey Transportation Heritage Museum in Phillipsburg and the historic Waterloo Village—a restored canal town. The heritage corridor gives reminders of its glory days: inland ports of call with names like Port Colden, Port Murray, and Port Warren, and descriptive identities such as Bread Lock and Green's Bridge.

During the past months a number of exciting happenings have occurred along the corridor. Some have been initiated by Warren County and some in partnership with local groups.

Warren County, in partnership with the state, has increased acquisitions of the canal prism and associated properties along the corridor. The County is developing master plans for the pocket parks at Bread Lock and Port Warren—Inclined Plane #9 West—and is planning to restore a portion of the canal prism. However, water run-off from housing developments, road realignments, and new stream encroachment regulations are holding up the latter project.

Signage Plan

Anticipating future use by the public

and to promote public awareness, a Morris Canal Signage and Graphics General Plan was created and adopted by the Warren County Morris Canal Committee. This plan covers all types of signage to be used within the greenway corridor. It has been initiated with the placement of signage at Bread Lock Park and Florence Kuipers Memorial Park, and will be used for identifying the Morris Canal Trail.

Morris Canal Way

In the town of Phillipsburg, a part of the abandoned canal right-of-way was filled in to create a neighborhood street, but never paved. Maryann Ignatz, who lives adjacent to this street, became interested in canal history. She got the town to name the street behind her house "Morris Canal Way" and pave it. Since the Morris Canal is on the State and National Register of Historic Places, a "canal crossed here" sign was placed next to the street sign by the author, a member of the Warren County Morris Canal Committee.

Maryann operates an old fashioned barroom in a building, a portion of which, and the patio behind, were built over the filled-in Morris Canal. A portion of the building also houses an old fashioned barber shop. The building was purchased by her grandfather in 1915 when it was called the Morris House. Canalmen were among his many patrons, since the canal ran directly behind the building. The name was changed to Steve's Café in 1939. Maryann has been collecting stories and memorabilia of the canal and railroad era and has many items on display. Included among the celebrities who have visited the tavern, was the actor Ken Kercheval of "Dallas" (Cliff Barnes) who lived on nearby Lock Street.

Port Colden Day

To celebrate the completion of the exterior restoration of a canal era school, Port Colden Day was held October 4, 2003. This two-story brick school was built in 1869 across from the canal basin and, when no longer used for school, was used for storage for many years.

The canal was abandoned in 1924 and in 1931 a new school was built in the former basin—100 years after the opening of the canal. (This probably was a mistake because the clay liner under the former basin causes water problems for the school.)

(Continued on page 18)



Foundation of the canal store in Florence Kuipers Memorial Park. *Photo by Myra Snook.*

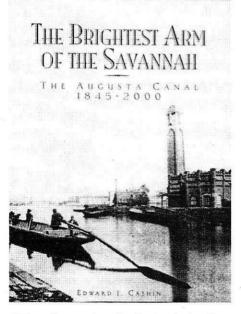
BOOK CORNER

THE BRIGHTEST ARM OF THE SAVANNAH: The Augusta Canal 1845-2000

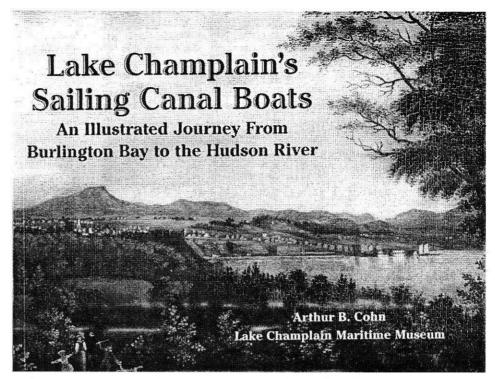
By Edward J. Cashin

Reviewed by David G. Barber

This book is a little unusual for this newsletter as it is about a canal that is mostly a three level industrial power canal rather than a through, navigation canal. However, the upper level of the canal has a lock at its upstream end and did carry boat traffic from upstream areas into the industrial city. While through navigation is discontinuous at the lower end of the canal, downstream navigation also exists to the sea at Savannah, GA.



Using the canal as the focus, the book is actually about the history of the city of Augusta itself. The story begins with the initial settlement of the area and continues with the proposal and later construction of the canal to make use of the waterpower available at the falls in the Savannah River. It continues with the growth of manufacturing and the history of the city. Particularly noteworthy is Augusta's role as the armory of the Confederacy. The later story describes the growth as a textile center as production shifted southward from New England.



More recently, the description is of the decline of the canal, the threats to its continued existence, and its rebirth as a park and modern community asset.

Copies are available at \$18.95 (soft cover) or \$27.95 (hard cover) plus tax and \$3.00 S&H from the Augusta Canal Authority, P.O. Box 2367, Augusta, GA 30903-2367
Phone 888-659-8926

Web site: www.augustacanal.com

LAKE CHAMPLAIN'S
SAILING CANAL BOATS:
An Illustrated Journey
From Burlington Bay
to the Hudson River

By Arthur B. Cohn

Reviewed by David G. Barber

As the title suggests, this book by the Lake Champlain Maritime Museum discusses the sailing canal boats that once traveled Lake Champlain from the Champlain Canal at Whitehall, NY to the various lake ports in New York, Vermont and Quebec. But, it is more than the title suggests as it is also an extensive history of the Port of Burlington, Vermont and of Lake Champlain's maritime history. It is very ex-

tensively illustrated.

The origins of the book are in the museum's extensive underwater charting of the shipwrecks that lie on the floor of Lake Champlain and the rediscovery that many of these are canal boats with sailing rigs. The book discusses the four classes of these boats and the current project to build a full sized working replica. The work seems to be very accurate when discussing these subjects. Books on canal boats are rather rare. The boats are usually only mentioned as a detail of the larger canal picture.

Unfortunately, when the subject travels farther afield to the connecting canals, a few inaccuracies creep in. The discerning canal historian will notice the first immediately on opening the book: the map of the New York canals is not that of the Nineteenth Century canals that the sailing canal boats are contemporary with (where the original and enlarged Erie Canal passed south of Oneida Lake and through Syracuse). Instead, the map shows the Twentieth Century route of the barge canal system that passes through Oneida Lake and Three Rivers Point.

The second error I noted was the statement that enlargement of the original Erie Canal was begun in 1835 and

(Continued on page 19)

FROM THE EDITOR'S DESK

I would like to take this opportunity to thank all those people who have submitted material for inclusion in *American Canals*. Over the last several months I received far more material than could be included in this issue. Please be patient and you may see your material in an upcoming issue. In the meantime, please keep those interesting articles coming in.

I am attempting to get American Canals back onto its proper schedule. You reasonably expect to receive the Spring issue closer to Memorial Day than the Fourth of July, and I am working to bring this about. Please bear with me for the next several issues as I try to catch up on the schedule. I do wish to point out that you received the Winter issue an additional 13 days later than necessary due to a problem with our mailing service. We are taking measures to prevent a recurrence of that particular problem.

Paul J. Bartczak

PARTIAL BIBLIOGRAPHY OF U.S. CANAL ENGINEERING WORKS

ACS Engineering Design Committee John Lamb, Chairman (updated December 26, 2003)

1. MATHEMATICS AND TREATISE ON CANALS

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2. DOCUMENTS TENDING TO PROVE THE SUPERIOR ADVAN-TAGES OF RAILWAYS AND STEAM CARRIAGES OVER CANAL NAVIGATION

John Stephens, New York Printed by T. & J. Swords, 1812.

3. MISCELLANEOUS PARTICU-LARS OF INFORMATION RE-SPECTING THE MIDDLESEX CA-NAL NEAR BOSTON IN THE STATE OF MASSACHUSETTS Compiled by Two New York State

ERRORS AND CORRECTIONS

The following errors were noted in the Winter 2004 issue (Vol. XXXIII, No. 1) of *American Canals*:

On Page 2, the OLD organizational Web address (www.americancanalsociety.org) was listed. The new address (www.americancanals.org) should have been listed.

Also on Page 2, the e-mail address for William Gerber was incorrectly listed as bill-gerber@bostonbbs.org when it should have been bill_gerber@bostonbbs.org (an underscore rather than a hyphen between bill and gerber).

On Page 16, the block announcing the new ACS Web site inadvertently misspelled the Web address as www.americanacanals.org (with an extra a between american and canals). The correct address is, of course, www.americancanals.org as noted above.

Your Editor regrets any problem or inconvenience caused by these errors.

Canal Commissioners, 1816.

4. A TREATISE ON INTERNAL NAVIGATION

Compiled by Samuel Young (a New York State Canal Commissioner), 1817.

- 5. REPORT ON CANALS ROADS AND OTHER SUBJECTS William Strickland, Philadelphia, 1826.
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- 7. REGULATIONS FOR THE GOVERNMENT OF SURVEYING PARTIES

General Charles Gratiot, U.S. Topographical Bureau; 1830. 8. A CONNECTED VIEW OF THE WHOLE INTERNAL NAVIGATION OF THE UNITED STATES, NATURAL AND ARTIFICIAL, PRESENT AND PROSPECTIVE.

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John Millington,

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(Continued on page 19)

THE PROPRIETORS OF LOCKS AND CANALS ON THE MERRIMACK RIVER What else did they do?

by Bill Gerber

Toward the end of the 18th century, Merrimack Valley forests became an important source of timber and wood products. These were used for ship and home building, fuel and export, and commanded a high price in the seaport towns. But in addition to the great falls at Patucket [sic], there were other falls and rapids on the Merrimack River that presented lesser but still still significant obstacles to the transporting of these commodities to market.

In 1792, the legislature of Massachusetts incorporated Newburyport merchants and ship builders Dudley Atkins Tyng, Esq., William Coombs, Joseph Tyler, Nicholas Johnson, Joshua Carter, and others, as the Proprietors of Locks and Canals on the Merrimack River (PLC/M). The company was charged to make the river navigable by boats, rafts and masts, from the New Hampshire line to the tidal waters of the river. In the Act of Incorporation, the PLC/M were empowered to build canals and locks and perform other operations as might be necessary to remove or lessen river obstructions. Section 8 of the Act of Incorporation identified several falls and rapids requiring attention. These included: "Wickasick, Patucket, Hunt's, Varnum's Parker's, Peter's, Bodwell's and Mitchell's Falls".

During the summer of 1794, Joseph Tyler, who also supervised construction of most of the Patucket Canal, supervised "improvements" (unspecified) at Wickasick Falls (adjacent to Wicasee Island, aka Tyng's Island, the present day site of Vesper Country Club), where the river dropped three feet in 100 rods. It seems certain that his efforts included at least the removal of stones to clear a channel through the falls. Construction of a wing-dam, blasting of ledge with gunpowder and/or other actions may also have been required to further improve passage through the channel.

(In 1812, the Middlesex Canal Company also made "improvements" at Wicasee Falls. The following year they began construction of a canal that opened in about 1816.)

In September, 1794, the PLC/M established a survey committee to determine what actions were required to render the remaining rapids navigable, "agreeably to the Act of Incorporation", together with the probable expense to the Proprietors and the income that might be obtained if they made the investment. (The remaining rapids were all downstream of Pawtucket Falls.) The survey committee consisted of: Loammi Baldwin, Esq., Joseph Tyler, Capt. Nicholas Johnson, Capt. John O'Brien, and Parker Varnum.

Not being one of the identified Proprietors, it is interesting that Loammi Baldwin was part of the survey team; in fact, his was the first name on the list in the minutes of the meeting that authorized the team. His presence might be partially explained by the fact that he owned 13 shares of stock in the PLC/M; but there is a more likely reason.

Only a month or two earlier Baldwin had worked with William Weston, a British Canal Engineer, to survey two possible routes for the Middlesex Canal. At that time, he had an opportunity to use one of Weston's Wye-Level instruments which provided means to make accurate elevation measurements along a survey route. (The Wye-Level was a precursor to the modern surveyor's transit.) Baldwin borrowed one of these instruments from Weston and placed an order with a firm in London for two more, to be used by the Middlesex Canal Company. Quite likely, the Proprietors were anxious to avail themselves of the considerably improved elevation measurements made possible by this instrument, and Baldwin was the man who knew how to use it.

The conclusions of the survey committee, as reported to Proprietors in October, 1794, were that: it was not practicable to construct locks and canals by Peter's and Mitchell's Falls; even if it were practical, the income would fall very short of the return needed for the investment required (not less than 20,000 Pounds); but, they noted, a sum of 1,000 Pounds, prudently spent, would render all the falls navigable for boats, rafts and masts.

Since no toll could be expected, the Proprietors would not be able to recoup any investment in the lower falls. Nevertheless, they recognized that advantages would accrue to inhabitants living near the river from improvements to river navigation. Because of this, they reasoned, it should not be difficult to collect the necessary funds from contributions by local residents. With approval of the court, they opened a subscription account and proceeded to raise the money. This effort eventually raised in excess of \$1400, most of which was spent on the "improvements".

In 1795, the PLC/M appointed Col. James Varnum, Esq., of Dracut, to supervise improvements to the rapids downstream of Pawtucket Falls - to render these remaining rapids navigable, "agreeably to the Act of Incorporation" - and authorized him to expend the subscription funds to accomplish whatever actions and tasks he determined were required. The minutes of subsequent meetings of the Proprietors suggest that, because 1795 was a 'wet year" and no work could be done, the work was most likely accomplished in 1796. (The improvements were probably similar to what Tyler did at Wickasick; however, no documentation has yet been found that describes the nature of either Tyler's or Varnum's work.)

As noted above, the PLC/M was charged to make the river navigable by boats, rafts and masts. Rafts and masts, obviously, make a one-way trip, and so the "improvements" noted above would likely have been quite adequate to facilitate their delivery. But what about boats? What provision did the company make to enable boats to return up the river? (Add this to the list of unanswered questions!)

Little evidence has yet been found of any continuing PLC/M interest in the lower falls. However, in 1818, Baldwin Family papers indicate that they did ask Benjamin and Cyrus Baldwin

(Continued on page 19)

TRAILS UPDATE—LOST AND FOUND!

by Dan McCain

While hiking the lower portions of Delphi Historic Trails along Deer Creek. Canal Board member Brian Stirm found the 16 foot tall "A frame" from the Riley Park Suspension Bridge. Last July's record flooding had destroyed the unique foot bridge built by volunteers in 1998. Water carried these massive timbers over a mile downstream to near the Wabash River. They were woven into a log jam across from Trailhead Park. Stirm also earlier helped salvage many pieces of the boardwalk and old bath house originally from Riley Park that were found near Indiana 25 bridge over the creek.

Volunteers removed this valuable intact frame from tons of debris out over Deer Creek with the aid of chains, cables, the City backhoe and willing hands. Ken Walton offered his help and tractor. As he was hooking up a chain (first picture) over the perilous log jam, Ken's cell phone dropped out of his pocket. He watched as it fell through the log jam down into the creek. Daniel Boone (left) helped position the chain and cable in preparation for removal.

City Parks employee Dennis Morrow (second picture) operated the backhoe



City Parks employee Dennis Morrow uses the backhoe to upright the A-Frame. *Photo by Dan McCain.*

and finally was able to upright the heavy 16 inch square treated pine A frame. Two frames supported the cables that spanned the creek. The one on the south side survived in place. The entire floor was ripped away in the flood and strewn downstream with the violent force of the flow.

The end product of the volunteer work found the timbers back at the Riley Park site where they will be used again in reconstructing the bridge. The floor level of the suspended deck will be raised to a higher elevation set by the Department of Natural Resources. DNR declared this a record setting flood. Many homes nearby the Park were destroyed or heavily damaged as were the stream banks and paralleling trails.

A coordinated effort this spring between City Park Director Carol Stradling and volunteers will net a reconstructed bridge placed again between the end of Wilson Street and Riley Park as a part of Delphi's Historic Trails. If you are interested in helping financially or with volunteer labor, contact Stradling, Dick Bradshaw (574) 686-2346, Mary Ives (765) 564-2374, or leave a message at 564-6297.



Daniel Boone (left) and Ken Walton fasten a chain and cable to the A-Frame so that it can be pulled free of the log jam. *Photo by Dan McCain*.

C&O CANAL LAUNCHES BILLY GOAT TRAIL STEWARD PROGRAM

from a Press Release dated March 23, 2004

Hagerstown, MD -- Chesapeake & Ohio Canal National Historical Park will launch the Billy Goat Trail Steward Program as part of a cooperative effort between the Potomac Appalachian Trail Club, The Nature Conservancy, and the National Park Service. As part of the Volunteers in Parks Program, the volunteer Billy Goat trail stewards will educate hikers about the area's diverse ecosystem and the importance of preserving it. Through trailhead contacts and educational hikes, trail stewards will promote outdoor ethics to teach hikers ways to minimize impact on the environment.

This program was made possible by a conservation grant from the outdoor outfitter REI to the Potomac Appalachian Trail Club, a volunteer organization that maintains the Billy Goat Trail in Great Falls, Md. Additional funds for the program were obtained from a Take Pride in America grant to the C&O Canal. Funding will be used for Leave No Trace training for 10 trail stewards, who will volunteer at the trailhead on weekends. The Leave No Trace program encourages visitors to recreate wisely and carefully to minimize their impact on resources, wildlife habitat, and fellow visitors for all parklands, including the C&O Canal.

For more information about the Billy Goat Trail Steward Program, please call the C&O Canal volunteer hotline at 301-767-3706 or visit: www.nps.gov/choh/Volunteers/vip.html.

C&O CANAL BUDGET AND ANNUAL PERFORMANCE PLAN FOR FISCAL YEAR 2004 AVAILABLE FOR PUBLIC REVIEW

from a news release dated May 24, 2004

Hagerstown, MD -- Chesapeake & Ohio Canal National Historical Park

Superintendent Kevin Brandt announced today that the park's Annual Performance Plan and documents providing details about the appropriated budget and fee revenues for fiscal year 2004 are available for review as required by the National Parks Omnibus Management Act of 1998.

Highlights of the park's total budget of \$7,729,800, which funds actions to implement specific goals in the Annual Performance Plan include:

\$474,903 for resource preservation and management including preservation and maintenance of historic structures, preservation of cultural landscapes, and protection of park natural resources.

\$1,473,884 to address resource and visitor protection including law enforcement, emergency medical and search and rescue services, and resource protection programs.

\$914,367 to address visitor services including operating six visitor centers along the C&O Canal, managing a reproduction canal boat operation, and continuing extensive interpretive programs.

\$440,700 for a regional communication center to operate a 24-hour per day, seven-days per week center for dispatch and criminal inquiry capabilities for eight parks throughout the National Capital Region.

\$3,757,235 for facility operations and maintenance including general maintenance throughout the park such as maintaining the towpath, mowing, cleaning restrooms, and maintaining equipment.

\$1,109,000 for general administration and management of the national historical park.

A copy of the park's complete Annual Performance Plan, prepared in accordance with the Government Performance and Results Act (GPRA) is available by writing to or visiting headquarters at

C&O Canal National Historical Park 1850 Dual Highway, Suite 100 Hagerstown, Maryland 21740

or by visiting the C&O Canal website at: www.nps.gov/choh under Management Docs.

The goals described in the park's Annual Performance Plan are derived from the National Park Service Strategic Plan, which established a performance management process for the service and incorporates the requirements of GPRA. Local strategic and annual plans are being revised in accordance with new guidelines. The Strategic Plan is available by writing to the C&O Canal National Historical Park at the above address.

LETTER TO THE PRESIDENT

E-Mail dated March 14, 2004

Hi Dave:

The Spring 2004 issue of The Chronicler, the publication of the Tuscarawas County (Ohio) Historical Society, contains an article about Ted Findley, the first inductee to the ACS Canal Buff's Hall of Fame. The article uses a lot of the information from his ACS nomination paper and bibliography. The County Historical Society is planning to erect an historical marker honoring him near the site of Ted's old home (now gone) on the berm bank of the Ohio & Erie Canal near Blake's Mills (now south New Philadelphia) and a lock.

They would probably welcome some publicity from the ACS.

Best Wishes:

Terry Woods

D&H CANAL MUSEUM ANNOUNCES ITS ANNUAL SUMMER CAMP

from a press release dated May 8, 2004

D&H Canal Historical Society is hosting a week long SUMMER CAMP, of learning and fun for children ages 7-12! Our day camp will give students the chance to experience 19th century life through games, activities and crafts.

The camp will run from July 19th – 23rd from 9:00am - 4:00pm

During this week campers will discover games children played during the canal era of the 19th century. They will also learn about historic toys, what they looked like, and how they worked, and how to make their own toys.

Campers will also learn about 19th century life and participate in numerous craft activities, including making lanterns, shadow puppets, candles and more.

The weekly fee for camp is: \$90 members; \$100 non-members. The daily fee is \$18 members; \$20 non-members. Cost includes materials and snack. Campers should pack a lunch.

For reservations or information contact the D&H Canal Historical Society at (845) 687-9311 or info@canalmuseum.org

The D&H Canal Historical Society preserves, protects, and perpetuates the unique history of the Delaware and Hudson Canal, particularly in Ulster County. The Society fulfills this mission by operating a Museum in High Falls and maintaining the Five Locks Walk, a National Historic Landmark; preserving the canal locks and environs, canal-related documents and artifacts; and educating the general public through lectures and programs; conducting and facilitating ongoing research; and acquiring property to further these goals.

CANAL BOAT CRUISES

Experience a Savory Get-Away on the Lehigh Canal

Cruise includes food, entertainment

Easton, PA April 2, 2004 – Take a cruise on the Lehigh Canal! Experience Italy, Germany, Cajun and the Caribbean. Or choose from one of our American specialties – picnic or barbeque. The schedule is as follows:

Evening Cruises departing at 6 PM:

Enjoy a Yankee Doodle Picnic on July 3 as we celebrate American Independence. Roy Justice will perform patriotic and folk favorites as Michael's Country Caterers serves fried chicken, sausage and peppers, baked beans, potato salad, cole slaw, corn bread, cookies, lemonade and ice tea. \$35 per person.

Indulge in a **Touch of Venice** on July 24. Enjoy Italian music as you savor a menu of bruschetta, insalata mista, penne pasta, tortellii carbonara, chicken marsala, bread, soda, and mini pastries provided by Juliana's Italian Restaurant. \$32 per person.

Imagine palm trees and white sand as **Caribbean Calypso** cruises down the Lehigh Canal on August 7. Relax to the beat of steel drums while you enjoy jerk chicken, pulled pork with potatoes and mojo sauce, fruit salad, rolls, desert, lemonade and ice tea by Michael's Country Caterers. \$32 per person.

On August 21, mellow out with Jazz, Blues and BBQ. Michael's Country Caterers provides a menu of smoked, shredded pork BBQ, BBQ chicken, corn-on-the-cob, red-skin potato salad, cole slaw, summer melon salad, brownies, lemonade and ice tea. Roger Latzgo performs jazz and blues favorites. \$35 per person.

Fall Foliage Cruises departing at 1 PM:

Celebrate **Oktoberfest** on October 2 with German music and a menu of roast pork, sauerkraut, apple-cider chicken, German potato salad, cole

slaw, gingerbread, and cider prepared by Michael's Country Caterers. \$32 per person.

Go **Down on the Bayou** on October 9 with zydeco music and a Cajun menu. Michael's Country Caterers serves tossed salad, blackened chicken, jambalaya, Louisiana macaroni salad, chunk apple salad with grapes and pecans, rolls, turtle cookies, lemonade and ice tea. \$32 per person.

Advance reservations required at least ten (10) days prior to ride. For reservations call (610) 515-5800 (select #2 from menu).

CANAL MUSEUM GALLERIES NEARLY ALL COMPLETED

by Dan McCain

Each week brings the core of Canal Interpretive Center volunteers back to work at least on M-W-F mornings. This cadre of craftsmen has made such progress in the last year that the Center displays and exhibits are nearly all complete. Without this volunteering and donation of historic items there wouldn't be the exciting story of the canal in its 1850s heyday to tell.

Delphi is one of the few places where the public can access a reconstructed watered section of the longest canal in the USA and visit a brand new interactive history center, clean and full of intriguing galleries. In addition over seven miles of trails take the hiker to many historic vistas. Credit belongs to scores of volunteers in this Carroll County town as these hosts have no paid staff to rely on.

Mary Crary is one of those dedicated volunteers and also a board member of the Canal Association. She is shepherding the development of the Dry Goods Shop. Originally the name was to be the "Millenary Shop" but because of the wider variety of items being planned for display in this exciting gal-

lery the name was changed. A wall mirror and historic clothing on hooks inside the shop encourages the visitor to put on a costume and travel back to the 1850s period.

Mary has coordinated the decor of this "walk through" gallery as volunteer Bill Draper has completed the carpentry. Bill has the expertise from being the head pattern maker for Peters Revington before he retired. Some of the beautiful wood trim comes from oak planks cut by volunteers four years ago for the restoration of the 1873 Iron Paint Creek Bridge now over the canal three blocks from the Center.

The ornate and colorful lavender print wedding dress was worn in 1853 by the Delphi bride of Dr. Edmond Spotswood. The silk dress had been brought to Delphi from New York City on a Wabash & Erie Canal boat. It was given to the Canal Association several years ago by a descendent of the Schermerhorn family. The display created by Crary with two dressed mannequins becomes a part of the case built by Draper. The second dress was donated by Draper's wife Pat. The case is covered by glass to show off the historic relic without having visitors touch the fragile fabric.

Another gallery now completed is the Archaeology display in the setting of the Irish Work Camp. This docu-

mented 1838-39 work camp found along the VanScoy Trail beside the Wabash River and near Trailhead Park is listed on the National Register of Historic Places. Many artifacts including "Bullet" represented by the skull of a mule with a bullet hole are part of this interactive exhibit. Electronic quiz boards allow museum visitors to match up artifacts and their daily uses by the Irish workers.

The canvas covering replicates the "shanty town" atmosphere where Irish workmen lived during the construction of the Deer Creek Dam and nearby wooden Lock #33. The "cook shack" for feeding 300-600 workers was located by Archaeologists seven years ago. Also next to the camp was the Wabash River and typical woodlands depicted by the dimly lit but colorful backdrop of this gallery.

All together a dozen galleries make up the Canal Interpretive Center located 11 blocks north of the Court House stoplight in Delphi. To see this marvelous interactive museum depicting the period of development, operation and demise of this historic canal, visit any Saturday 10 AM—4PM or Sunday 1PM—4 PM. This facility is made possible by the efforts of the many volunteers of the Carroll County Wabash & Erie Canal Association. Admission is free.



Mary Crary and Bill Draper admire the ornate 1853 wedding dress in the Dry Goods Shop display. *Photo by Dan McCain*.

GOVERNOR KERNAN PRESENTS HIGHEST HOOSIER AWARD TO DAN McCAIN

by Tom Castaldi

DELPHI, IND. MAY 7, 2004 — Acknowledging his work to develop the Historic Trails, Canal Park and the Wabash & Erie Canal Conference & Interpretative Center in Delphi, Indiana, State Representative Rich McClain presented a Sagamore of the Wabash award to Mr. Daniel McCain in behalf of Governor Joseph E. Kernan. During the April 20, 2004, annual meeting of the Carroll County Wabash & Erie Canal, Inc., Representative McClain read a letter from the governor commending McCain's accomplishments.

"I am honored to appoint you a Sagamore of the Wabash and to express the appreciation of all Hoosiers for your commitment to making Indiana a better place to live and raise a family. The term "Sagamore of the Wabash" was used by northeastern United States Native Americans to describe a lesser chief or other great person among the tribe to whom the chief would look for wisdom and advice. You, Dan, certainly fit that description. You have distinguished yourself by your humanity in living, your loyalty in friendship, your wisdom in council and your inspiration in leadership."

Mr. McCain has served as Carroll County Wabash & Erie Canal Inc., board president for three years, and an office his mother the late Roseland McCain pioneered when she was elected its founding president. He was instrumental in the development of the Historic Trails, Canal Park and Wabash & Erie Canal Conference & Interpretive Center. Mr. McCain worked for over 17 years to develop the Canal Center and has served as the president of the Canal Interpretive Center Commission, comprised of representatives from the canal corporation, City Parks Board and the City of Delphi.

Recently, Mr. McCain was honored when the Delphi Chamber of Commerce bestowed upon him its Samuel Milroy Award in recognition of his efforts to promote the economic and social well being of the town. Mr. McCain has or is serving in leadership roles for several non-profit organizations including: Banks of the Wabash, Wabash River Heritage Corridor, Canal Society of Indiana, Museum at Prophetstown, American Canal Society, the Indiana State Museum Foundation, as well as the Carroll County Heritage Tourism and the Carroll County Historic Bridges groups.

A graduate of Purdue University, Mr. McCain is retired after 34 years with the USDA Soil Conservation Service. In 1998, McCain was named the Progressive Farmer Magazine's "Man of the Year in Service to Indiana Agriculture".

TOWPATH TIDBITS

by Linda Barth

The National Science Foundation has awarded a \$1,430,204 grant to the National Canal Museum for the development, evaluation, and installation of interactive exhibits that interpret the history, science, and technology of canal construction and navigation. Exhibits will be incorporated into three galleries, comprising 8,282 square feet.

Aleksander Kwasniewski, president of Poland, has announced a spectacular program of boating events for 2004. The flagship event, **Round the Heart of Poland Grand Cruise**, will cover 1600 km in 59 days. In addition to cruising on rivers, participants will also tour the Gliwice Canal and the Elblag Canal with its five inclined planes.

The New York State Eastern Correctional Facility in Napanoch has loaned to the **D&H Canal Historical Society** a canalboat model built by inmate Ted Manikas. Mr. Manikas is also working on the restoration of the depot of the O&W Railroad on the prison grounds.

The Friends of the Delaware Canal (PA) are happy to announce the restoration of Lock 11. Work began early this year and should be completed by autumn. The Friends also sponsored a "Peer to Peer" conference, in which representatives of the C&O, D&R, Le-

high, and the Schuylkill met to share cost-effective, practical, efficient, and historic preservation methods to ensure the long life of our canals.

Kevin Brandt is the new superintendent of the Chesapeake & Ohio Canal National Historical Park. Since 1979, Kevin has served the park service as a landscape architect, Associate Regional Director for Planning and Professional Services, and assistant superintendent of the C&O.

The Camillus Erie Canal Park will begin its 2004 season of dinner cruises on July 7. Visitors can enjoy a delicious meal and a beautiful ride while helping to raise funds for the restoration of the aqueduct.

Delphi Historic Trails will again conduct a series of walks around the canal in Delphi, Indiana. Some walks include a trolley ride, and all are fun and educational. Call the Canal Hotline, (765) 564-6572.

From April 18th to May 1st, the Chesapeake & Ohio Canal Association sponsored the "The Hike That Created a Park." This walk commemorated the 50th anniversary of Supreme Court Justice William O. Douglas's 1954 trek to save the canal, with its scenic vistas and natural resources, from being paved over to become a parkway.

The Cascade Locks Park Association offers free, guided tours of the Cascade race and locks in downtown Akron, Ohio. Tours start at the Mustill Store at noon on June 13 and 27; July 11 and 25; August 8 and 22; September 5 and 19; and October 10 and 24.

The Canal Society of Ohio, in conjunction with the Indiana Canal Society, will tour the historic falls of the Ohio in Louisville, Kentucky, October 1-3, 2004. A special treat will be a tour of the Jeffboat riverboat yard across the river in Jeffersonville, Indiana. Watch for more details this summer.

After eight years of negotiations, the Walnutport Canal Association has purchased 1½ miles of the Lehigh Canal, south of the borough line. The

(Continued on page 20)

UNLOCKING THE ADIRONDACKS

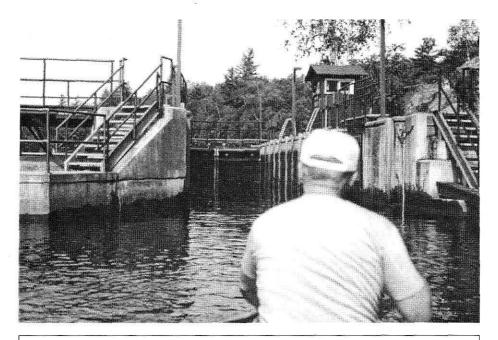
by David L. Kipp

Long before I became a canal enthusiast, a co-worker had piqued my curiosity by raving about what fun it was to go through the locks on the Saranac River in the north central Adirondacks. He and his kids had a ball he reported; going up and down through the self operated locks several times in their canoe. My opportunity to visit these locks in person finally came in the summer of 2000 and it turned out to be a memorable event, especially for someone who has now become a card-carrying canal buff.

My other hobby, besides canals, is canoe camping. Since being introduced to it in the early 1970's, I have been on over 30 trips within the "Blue Line" as Adirondophiles call the park's boundary. So it is only natural that whether hiking or canoeing or both is on the agenda, we throw the canoe on top of the van in case a passing body of water is just too tempting to miss.

Such was the case in July of 2000 when on Route 3 between Tupper Lake and Saranac Lake villages, we spied the boat launch at the Saranac River Fishing Access Site near the southern edge of Lower Saranac Lake. Consulting our Adirondack Canoe Map, we saw that "Lower State Lock" was less than an hour's paddle away, so we plopped the canoe in the water and took off towards the lock. My partner for this trip was fellow CSNYS member and long time canoeing/hiking partner, Carl Brozek.

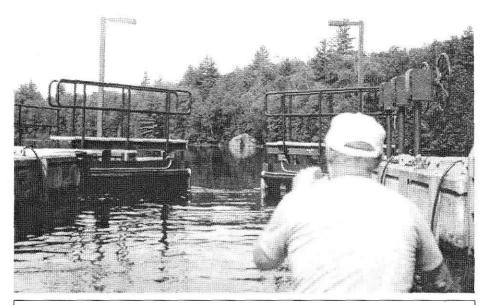
The Saranac River rises in a cluster of bogs and ponds that surround Upper Saranac Lake which drains via connecting streams through Middle and Lower Saranac Lakes, then widens out into Oseetah and Flower Lakes before narrowing down in the Village of Saranac Lake and heading northeast to eventually flow into Lake Champlain near Plattsburgh. We were now on the stretch of the River between Lower Saranac Lake and Oseetah Lake, a very placid and scenic stretch. If the wind is calm, the reflections of evergreens and



Lower lock on the Saranac River. Photo by David Kipp

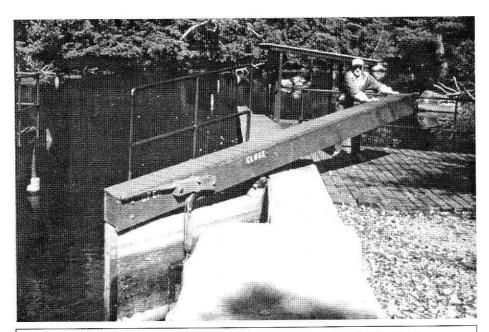
especially birch are spectacular. The river's course is sinuous, and every bend brings a new post card perfect scene. The banks are undeveloped with only an occasional state campsite to remind you of civilization. Finally, you round a bend and enter a wide bay and see in the distance, a cluster of obviously human-made structures filling a gap between the forest on either side of the stream.

To the right, the river forms a long straight line as it plunges over a dam emitting a muffled hiss. At the left end of the dam is the entrance to a descending lock with a small brown building nestled beside it. The lock walls and approaches were crisp, new concrete (we found out later the lock was rebuilt in 1988). The steel gates and valves are hydraulically actuated with electrical controls located in the lock house. We tied up at a small dock next to the approach wall and were greeted by a friendly lockkeeper (employed by the Dept. of Environmental Conservation) who was busy removing the cobwebs that the nightshift spiders had spun on the lock structures. He will lock



On exiting the lock, you pass the manual control wheels used when the lock tender is not on duty. Two of the wheels control the gates and the third controls the valve.

*Photo by David Kipp**



Using the balance beam to close the miter gate. Photo by David Kipp

through any boats in the daylight hours during the summer, but evenings and off-season, it is a self-operated lock. When the electricity (supplied by a generator in an out building) is shut off, the lock can still be operated mechanically by 2 sets of 3 pedestal mounted control wheels at each end of the lock-one wheel for each gate and one for the valve.

Obviously for locks that are often without a locktender on duty, statistics on lockages would be difficult to determine. Our garrulous lockkeeper reported that often on summer weekends there is a fairly steady stream of boaters and sometimes a line of boats waiting to lock through.

After photographing the 12x60-foot lock from every angle and watching one small motorboat lock through, we just had to try it ourselves. Locking down the 6 foot lift was quite smooth, but the return trip up required a firm grip on the lines draped along the sides of the chamber as the upstream water boiled into the lock giving our canoe a few moments of instability.

The first legislation authorizing the improvements on the Saranac River was passed in 1890. It appears that a wooden lock and some river dredging were accomplished in the 1890's at what is now called Upper State Lock between Middle and Lower Saranac Lakes. Around 1900, the dam across

the river and its associated lock (now called Lower State Lock) was authorized and completed by 1903. The motivation for these initial improvements might have been to accommodate the small steamboats that carried passengers and light freight among the lakes in the days before good roads and trucks. Also, some loggers may have used the river for moving timber to mills and markets. However by the 1930's, records of state repair work on the locks note that their use was for pleasure boating only.

The locks were built and maintained

initially by the Waterways Maintenance section of the NY Dept. of Public Works. Their records indicate that major repairs and overhauls took place about every 10 years during the 1930'3, 40's and 50's. Employment of seasonal lock operators began in the 1940's. In 1960, jurisdiction of the locks was transferred from the DPW to the Department of Conservation (now the Dept. of Environmental Conservation). In addition to the major upgrade of the Lower Lock in 1988, the Upper Lock was rehabilitated in 1993.

The Upper Lock is most closely approached by boat from the South Creek Fishing Access Site on Route 3 about 10 miles east of Tupper Lake. It has a small parking lot and small launch area which can get crowded on a fair weather day. You first paddle north on the creek for about 1/4 mile until you enter Middle Saranac Lake. It is a gorgeous body of water with several islands and is overshadowed by Ampersand Mountain rising up to the southeast. You must angle north east to find the mouth of the Saranac River channel and in doing so you pass a long stretch of sandy beach on your right. This is also accessible by trail from the Ampersand Mt. trailhead parking lot on Rt. 3. It would be a fine swimming spot on a hot summer day.

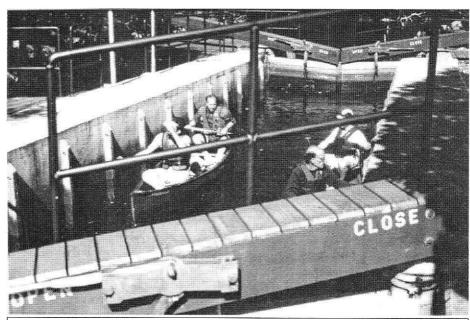
Channel buoys mark the entrance to the Saranac River which flows east at this



Canal Society of NY State member Carl Brozek and friend Jack Redfield man the guillotine valve levers built into each of the four gates. *Photo by David Kipp*

point and we entered a series of switch-backs through a marsh. Ducks were aplenty and no fewer than 5 great blue herons lumbered into the air at our approach. This canoe excursion was in late September and the surrounding forest and hills were warming up to their fall spectacular and made us forget about the chilly air and wind that always seems to be in your face. After about a mile of the zigzag stream, we rounded the last bend and the stream split-- rocks and rapids to the right and to the left an entrance to a lock with a small keeper's house next to it.

We alighted and to our utter delight, found this lock, although recently rebuilt of modern materials, was in design right out of the 19th century. Two pairs of miter gates guarded the chamber each with a long balance beam extending from the tops. In each gate, a guillotine valve controlled water into and out of the lock. These were operated by a long lever which you swing in a 180° arc as you stand on the gate. This lock is smaller than the Lower



Canoeists are typical users of the two-foot lift Upper Lock on the Saranac River in New York's Adirondack Mountains.

The chamber is about 12 feet x 45 feet. *Photo by David Kipp*

Lock being only 12x45 ft. with a 2 foot lift, but its diminutive size, wilderness setting and "primitive" functioning give it a charm and ambiance that is unique

and inspiring. Being a beautiful sunny blue-sky day, there were many parties of canoers and kayakers on the river and we stayed for an hour acting as lock operators for the boaters going through who seemed more than happy to have us perform the service.

Never from all my reading or canal site visits had I gained such an understanding or feeling of historical immersion as I did from this hands-on operation of a real lock with real boats being locked through. It was a thrilling emotional high which I highly recommend for any serious canaller and canal buff. Bring your children and grandchildren here too--they will love it. It's a great spot for a picnic lunch.

The sections of the Saranac River which contain the locks, and both Middle and Lower Saranac Lakes, are part of a water access only camping area that the State of NY maintains. Self propelled and motor boats in gaining access to many of the campsites on state owned shoreline and islands will need to pass through the locks. Consult the map I have referenced and check in with the State Ranger at the Saranac River boat launch on Rt. 3.

Well, it's not a canal, but with its charming locks and incredible scenery, no canal enthusiast should pass up the

The author, working a valve lever on the gate.

Photo by David Kipp

(Continued from page 5)

big project and there are numerous obstacles. I won't minimize them. But if a start were made with the available sections, re-gating a few locks, establishing powered tour boats and launch ramps on the watered sections, there is no telling how far or how fast progress would occur. The November, 2003 issue of Waterways World has a cover photo of a new aqueduct crossing a four lane, divided highway near Birmingham, England. The aqueduct was paid for by donations. The situation looks very similar to that south of Bolivar

We need to get used to thinking and talking big. We need to talk up the reality that these are navigation canals. I believe there a lot of people out there who would be interested in boating on this and other canals if they could. A link from Dresden to Cleveland would connect Lake Erie and the waterways of the northeast to the Ohio River. It would also create a cruising ring in the mid-west. Look at it on a map!

(Continued from page 6)

A walking tour guide was prepared by the Canal Committee for people to use to learn more about the canal and the many buildings and sites associated with this canal "port" town. Canal features included the remains of the canal prism, Lock 6 West and Inclined Plane 6 West. Local history displays, canal paintings, and working canal models were part of the day's celebration.

Book Signing

A book signing was held for the public at Bread Lock Park on November 10, 2002. A Full Hand, a children's book based on the Morris Canal, written and illustrated by Thomas Yezerski, depicts scenes of the area around Bread Lock (Lock 7 West) at the time the canal was in operation. Mr. Yezerski took time out from signing to read his book to children and adults alike. Copies of the book were purchased by the Warren County Canal Committee and distributed to all public primary schools in Warren County, and to two schools in Sussex County, located near the former

canal.

Florence Kuipers Memorial Park

A dedication of Florence Kuipers Memorial Park was held October 25, 2003. Florence initiated the idea of a trail along the canal towpath as a place for horseback riding, hiking, and biking. She was involved in the initial planning of the Morris Canal Greenway across Warren County and she was an active member of the Warren County Canal Committee, the Warren County Board of Recreation Commissioners, and a member of the Warren County 4-H Leaders Association. She also served as Postmaster at Delaware, N.J. for many years, occasionally delivering mail on horseback. Over 100 attended this celebration and many hiked the mile section of the towpath and enjoyed the beautiful fall foliage.

This pocket park, on the hillside at North Hackettstown, overlooks Centenary College and Hackettstown. North Hackettstown was an industrial area along the canal on the border of Hackettstown and Independence Township which included a store, lumber and coal yards, a distillery, and a cluster of houses. Today the park contains the large foundation of a canal store, the towpath, and the prism that is mostly intact with occasional water in parts.

Bread Lock Park

A master plan has been completed for Bread Lock Park. The park contains a section of intact prism, a buried lock, and mule barn and lock tender's house sites. This site was known for fresh bread being sold to boatmen as they waited to go through the lock. Associated with the property is the right-of-way of the former Easton-Washington Traction Company and the first mile of concrete paved highway, an experiment by Thomas Edison. Much of the park area has been cleared of brush and debris, and is open during daylight hours.

At present, the Warren County Historical Learning Center resides in a modern house that was built in the canal prism. The Center maintains a small museum featuring working models of an inclined plane and lock, along with other models related to local history.

The museum is open to the public the first Sunday of each month from 1—4 PM.

Port Murray Day

On June 5, 2004, a celebration of Mansfield Township's 250th Anniversary was held. The celebration took place in Port Murray and included historic displays, demonstrations of a working canal lock, a parade, fireworks, and other events. Since the canal traversed the center of town, signage was placed along the canal and tours followed a portion of the towpath past the former canal basin where immersion baptisms were conducted by the local Baptist church. A walking tour guide was available to learn more about the many canal and railroad related buildings and sites within the town.

Further information can be obtained by contacting:

Warren County Morris Canal Committee c/o Warren County Planning Dept. 219 Route 519 S. Belvidere, NJ 07827 www.co.warren.nj.us and

Highlands Project at Bread Lock Park www.highlandsproject.nj.us

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Upper and Lower Locks on the Saranac River. Especially, if one of your life goals is to visit every lock in NY State!

Reference: Adirondack Canoe Map, Plinth, Quoin & Cornice Associates, Keene Valley, NY 12943 (Continued from page 7)
completed quickly while enlargement of the Champlain Canal was more leisurely and not completed until 1862. In fact, enlargement of both was affected by a national financial panic in 1837 that led to the Stop Law of 1842. Many Enlarged Erie Canal structures were left unfinished or isolated and unused for several years until the economy recovered. The Erie Canal enlargement was not completed until 1862 when it was legislated complete by act of the state legislature.

Other than those points, which are away from the book's focus, I found it to be very informative and easy to read.

Copies are available at \$24.95 (soft cover) or \$39.95 (hard cover) from the Lake Champlain Maritime Museum, 4472 Basin Harbor Rd., Vergennes, VT 05491

Phone 802-475-2022 Web site: www.lcmm.org

(Continued from page 8)
McGraw-Hill, New York, 1911.

19. AMERICAN CIVIL ENGINEERS POCKET BOOK:

Merriman, Mansfield, Ed., Wiley, 1925.

20. MINING ENGINEER'S HAND-BOOK

Robert Peele, John Wiley & Sons, New York, 1930.

21. CIVIL ENGINEER'S HAND-BOOK

Robert Peele, Wiley & Sons, New York, 1930.

22. GENERAL ENGINEER'S HANDBOOK

O'Rourke, McGraw-Hill, New York, 1932.

23. THE AMERICAN CIVIL ENGINEER

Calhoun, The Technology Press, Cambridge, Mass., 1960.

24. FUNDAMENTALS OF TRANS-PORTATION ENGINEERING Henes & Elske,

McGraw-Hill, New York, 1960.

25. THE CIVIL ENGINEERING OF CANALS AND RAILROADS BEFORE 1850

Chrimes, Mike, Ed. Studies in the History of Civil Engineering, Vol. 7, Ashgate Publishing, Brookfield, VT, 1997.

(Continued from page 9)

to survey the Merrimack again. The stated purpose of this effort was to estimate the expense of making a canal from the Head of Hunt's Falls to the Foot of Bodwell's Falls [in Methuen]. At least part of this work was conducted a few years later but no evidence has yet been found of any actions that resulted from this survey until construction of the Essex Dam, at Lawrence, completed in about 1848.

No evidence has been found that the PLC/M built any other canals; thus, there probably are no old transportation canals submerged behind the Essex Dam. It is likely, though, that some of the lower Merrimack's falls were flooded out! (If anyone knows of an old map that shows the lower falls, please tell me where to find it. Current maps of the Merrimack River still show Hunt's and Mitchell's Falls; however, none of the other four falls are listed on any of the maps that I've seen. Most likely, these falls were inundated by the lake behind Essex Dam.)

Realization that the North Canal at Lawrence wasn't constructed until 1848, just a few years before the other canals "folded", drove research into the actions of the PLC/M. The basic questions were - what did the Proprietors do at the lesser falls and rapids, five decades earlier, to fulfill the terms of their Act of Incorporation? What, if anything, did the North Canal replace? Full answers to these questions are not yet known; and likely won't be known unless the papers of Col. James Varnum, or the report of the PLC/M survey committee, or perhaps Loammi Baldwin's notes from that survey can be found. In their absence, however, it might be possible to infer what was done by an archeological examination of Hunt's and Mitchell's Falls.

MUSEUM SPONSORS FALL LECTURES

Great Strike of 1902, Three Gorges Dam, Steam Railroads, and Railroad Films

Series Begins September 16

Easton, PA, June 18, 2004 – The National Canal Museum and the Pennsylvania Canal Society will sponsor a Fall Lecture Series at the Two Rivers Landing auditorium, Easton, PA. Enter the building at the Pine Street (rear) entrance. Lectures are free and open to the public and begin at 7:30 PM.

On September 16 Professor Robert Janosov of Luzerne County Community College presents a PowerPoint program on the state of Pennsylvania's anthracite coal regions on the eve of the 1902 national coal strike. An enhanced version of the program he gave at the 2002 Centennial Commemoration of the Great Anthracite Strike, Prof. Janosov's lecture covers many aspects of northeastern Pennsylvania's economy and social structure.

Professor Thomas W. Burkman presents a slide and video lecture on September 23 featuring the massive Three Gorges Dam and Lock System on China's great Yangtze River. When complete, this dam and lock system will be the largest in the world. Professor Burkman is Director of Asian Studies at the State University of New York at Buffalo.

On October 21 "Steam Railroads of the World" is the subject of a slide lecture by Donald S. Young, a noted local steam locomotive enthusiast and engineer. This presentation will focus on countries such as Poland, Indonesia, India and Chile where steam locomotives were still functioning as part of major railroads during the late twentieth century.

An evening of historical railroad films on the southwestern states of Arizona and New Mexico concludes the 2004 lecture series on November 18. National Canal Museum historian Lance E. Metz will host the lecture. The

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SPRING 2004 CANAL CALENDAR

by Linda Barth

May 1-2 – Re-enactment of the attack on Havre de Grace during the War of 1812; Lock House, Susquehanna Museum of Havre de Grace (410) 939-5780.

May 16 – Locktender's Open House, Schuylkill Canal Lock 60, Mont Clare, PA (610) 917-0021; www.schuylkillcanal.com.

May 20 – Lecture Series, Hugh Moore Historical Park and Museums: Pennsylvania Commonwealth Professor George Turner, of Bloomsburg University, will present "The Lattimer Massacre — Pennsylvania's Worst Labor Conflict." The slide lecture will focus on the infamous 1894 Lattimer Massacre, during which striking immigrant anthracite miners were shot in cold blood near Hazelton, PA. Two Rivers Landing, Centre Square, Easton, Pennsylvania (610) 559-6613.

May 29 – Guided Nature and Historical Walk, North Park Trail, 10 am; meet at Lock House, Susquehanna Museum of Havre de Grace (410) 939-5780.

June 2-4 – World Canals Conference, St. Catharines, Ontario, Canada; (905) 688-5601 for information and registration; www.worldcanals2004.com.

June 12 – Canal Fest at Riverbend Farm on the Blackstone Canal, Oak Street, Uxbridge, MA (508) 478-4918.

June 12 - Guided Nature and Historical Walk, North Park Trail, 10 am; meet at Lock House, Susquehanna Museum of Havre de Grace (410) 939-5780.

June 12 – Folk Concert by the Delaware and Raritan Canal, Blackwells Mills, New Jersey; free; no registration. June 13 – Canoe the Canal Day, 1-4 pm, Lawrence (NJ) Historical Society; (609) 896-0782; www.thelhs.org

June 19 – 10th Annual Lock Tender's Beer Fest and Auction; wine, light refreshment, music; Lock House, Susquehanna Museum of Havre de Grace; (410) 939-5780.

July 10-11 – Chesapeake & Ohio Canalfest in Cumberland, Maryland; contact Mary Anne Moen (301) 759-3197.

June 19-26 – Annual James River Batteau Festival; www.batteau.org.

June 19 – Oldtown Summerfest on the C&O Canal; contact Rita Bauman, (540) 888-1425; wdbauman@visuallink.com.

June 27 – Schuylkill Canal Day, 9 am to 5 pm; Schuylkill Canal Lock 60, Mont Clare, PA (610) 917-0021; www.schuylkillcanal.com.

August 14 – Towpath Day at the Camillus Erie Canal Park; 5750 Devoe Road, Camillus, NY 13031 (315) 488-3409.

August 21-22 – Chesapeake & Ohio Canal Days, Williamsport; Visitor Information, (301) 739-4200.

September 5 – Heritage Walk: Hot Blast and Iron Pigs, Ironmaking in Hugh Moore Park, Easton. (610) 515-8000.

September 21-23 – Erie Canal cruise, Syracuse to Albany, sponsored by the Canal Society of Indiana indcanal@aol.com.

September 24 – First end-to-end bike tour of the East Coast Greenway. To find out when the riders will pass through your state, go to www.greenway.org.

The first ever designated section of this trail was the Delaware and Raritan Canal in New Jersey.

October 1-3 – Canal Society of Ohio and Indiana Canal Society tour of the falls of the Ohio; Mike Morthorst (513) 791-6481.

October 17 – Canal Festival at Walnutport, PA, on the Lehigh Canal (610) 767-5817.

October 30 – "Life and Death on the C&O Canal" – Great Falls Tavern, noon; call Pat White at (301) 977-5628.

(Continued from page 14) property, totaling 40.52 acres, now gives the Association more than 142 acres of canal property along four miles of watered canal.

The Chesapeake & Ohio Canal National Historical Park has begun a series of projects to repair damage from the flooding caused by Hurricane Isabel in 2003. Other projects are planned to help the park sustain floods in the future. One element of the Great Falls Tavern project will be the installation of fixtures for a removable flood wall that can be quickly installed when a flood is anticipated. In addition, many of the park's pedestrian bridges are built to float off their foundations and pivot to prevent them from damming debris that could increase a flood's destructive power.

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films, produced in the 1950s by the
Santa Fe Railroad, highlight not only
the Santa Fe's luxury passenger
streamliners such as the Super Chief

streamliners such as the Super Chief, but also Native American arts and crafts of the region.

For more information, call the National Canal Museum at (610) 559-6613.