

AMERICAN CANALS

BULLETIN OF
THE AMERICAN CANAL SOCIETY

BULLETIN NUMBER 77

Editorial Address—Rural Route 1, Box 87T, Savannah, TN 38372

MAY 1991

PRESIDENT'S MESSAGE

Believe it or not, the Gulf War had an effect on the Kanawha Canal here in Richmond. It was running brim-full, and I was told that the city was concerned about sabotage to the drinking water pipe laid in the bottom of the canal bed, so they covered it with all the water they could!

A.C.S. member John Droege has formed an "ad hoc Glossary Committee" to work up a glossary of canal terms. He's looking for existing glossaries, and other canal terms from our members around the country. If you'd like to participate, get in touch with him at Rt. 1, Box 31, Brownstown, Indiana 47220. The goal is a list of relatively unambiguous terms, so we can talk the same language, and be understood by the novice. For those interested in getting into details and carefully going through old records, it could also be an exciting start toward learning how our canal terminology differed from England's, how it varied on different canals, and at different times, and by different people (e.g., engineers vs. boatmen). What's a "double lock" where you come from? Did your locks have gate pockets or gate recesses? What about sluice gates, wickets, or paddles?

Another A.C.S. project, the Canal Index, now has a new name: the Historic American Canal Survey (H.A.C.S.). We thought that would help bring it out from under a bushel. There are still a great many canals to write up for H.A.C.S., so if you are interested in helping to complete the survey, please get in touch with Bill Dzombak.

Lance Metz's annual Canal History and Technology Symposium was quite a success again this year, with a good percentage of canal topics. If you missed it, copies of the proceedings are available from the Canal Museum, P.O. Box 877, Easton, PA 18044.

After the symposium, Bill Moss, president of the Canal Society of New Jersey, showed me around Waterloo Village on the Morris Canal. It's well worth a trip to see the society's museum and the impressive Morris Canal inclined plane which is scheduled for restoration, as discussed in our August issue. This promises to be one of the most significant canal restorations of the century. We're all hoping that the plane will be thoroughly studied archaeologically before restoration begins, otherwise a great deal of important information, vital to the interpretation of the site, will be lost.

On April 14th we lost a good friend of the society, Bill Shank's wife Ruth. She was involved with the society since its inception, and was the businesswoman behind Bill's publishing venture, the American Canal and Transportation Center. Our condolences to Bill and his family.

— Bill Trout

JULY FESTIVAL – LEHIGH CANAL



Canal boat "Josiah White" operates on a half-hour, half-price schedule on festival day.
Photo by David T. Boyer

The sound of the boatman's horn announces the arrival of the canal boat and signals the locktender to open his gates. A pair of mules approaches at the pace of a quick walk pulling on a long rope fastened to the towing post in the bow of the boat. The mule driver walks beside the team. The captain stands in the stern of the boat and gently pulls on the tiller to steer the boat into the lock. The locktender's wife comes out of the lockhouse to greet the boat and fill her laundry bucket with water from the canal.

The Canal Festival takes place along the banks

of the restored Lehigh Canal in Hugh Moore Park in the city of Easton, Pennsylvania. It will run from 10:00 a.m. to 6:00 p.m. on Saturday, the 13th of July, 1991.

Hugh Moore Historical Park and Museums organizes the event which features all-day musical entertainment on two stages and on board the "Josiah White." Also featured are children's entertainment, an arts and crafts show with 75 regional artists and artisans demonstrating, exhibiting, and selling their work, all kinds of food from fritters to

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SECOND INTERNATIONAL CONFERENCE ON HISTORIC CANALS

Innovative uses of historic canals will be the topic of the second International Conference on Historic Canals, beginning Sunday, the 20th of October 1991, and running through Wednesday, the 23rd. The conference will be held at the Akron Hilton Inn at Quaker Square in Akron, Ohio, with field trips to various points on the Ohio and Erie Canal. Quaker Square itself is a historic site, the original home of Quaker Oats, and one of the advertised attractions of the conference is the opportunity to sleep in a refurbished grain silo.

The sponsors of the conference include the National Park Service, the Ohio Department of Natural Resources, and the City of Akron, as well as a number of private-sector organizations such as the Cuyahoga Valley Association, the Canal Society of Ohio, the Summit County Historical Society, the

North Cuyahoga Valley Corridor, Inc., the Ohio & Erie Canal Corridor Coalition, and the Cascade Locks Park Association.

At last report, there were still openings at some of the sessions for persons interested in presenting their own ideas or experiences concerning innovative uses of historic canals. Thirty-minute presentations are suggested. The definition of "innovative uses" seems broad enough to include just about anything other than hauling barges loaded with commercial freight. Call Rory Robinson at 216 524 1026 or Paul Labovitz at 216 650 4414 if you have any questions, or write to: Second International Conference on Historic Canals, c/o Cuyahoga Valley Association, P.O. Box 222, Peninsula, Ohio 44264.

[Information by the National Park Service.]

American Canals

BULLETIN OF THE AMERICAN CANAL SOCIETY

Publisher: **William H. Shank, P.E.**, 809 Rathnon Road, York, PA 17403. 717 843 4035.

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AMERICAN CANALS is issued quarterly by the American Canal Society, Inc. Objectives of the society are to encourage the preservation, restoration, interpretation, and use of the historic navigational canals of the Americas; to save threatened canals; and to provide an exchange of canal information.

Annual subscription to AMERICAN CANALS is automatic with A.C.S. membership. Send dues payment (\$12 minimum) to Sec'y/Treas. Charles W. Derr, 117 Main St., Freemansburg, PA 18017. Single copies may be purchased at \$3.00 from the publisher.

Manuscripts on subjects consistent with the objectives of the A.C.S. are welcome. They should be sent to the editor.

ROSCOE VILLAGE FESTIVAL

A new festival has been added to the calendar of events at Roscoe Village this season. Featuring games and entertainment, the underlying purpose of the event appears to be either to give the children something to do while the adults in the family pursue their historical interests, or to seduce the children into developing an interest in history. Raising money to support the work of the Roscoe Village Foundation may also have something to do with it. In any case, the 15th and 16th of June are programmed to be a week of activity and merriment for all ages.

Roscoe Village is a restored village of the 1830s, strategically located at the junction of the Walhonding and the Ohio-and-Erie canals and the source of the Muskingum River. The modern city with which it shares the site is Coshocton, Ohio, halfway between Columbus and Canton on U.S. highway 36 and Ohio 16. Call 800 877 1830 for information about this and other attractions and exhibits.

Ruth Hershey Shank, 1913-1991

Ruth H. Shank died on the 14th of April, following a long illness. She was the wife of William H. Shank, longtime editor of *American Canals* and currently its publisher and a past president of A.C.S. Ruth Shank was closely associated with her husband in the formative days of the American Canal Society, and in the management of their publishing ventures, including books of The American Canal and Transportation Center.

ENDANGERED WISCONSIN WATERWAYS

Both the Portage Canal and the Fox River are under attack by the Corps of Engineers, according to an alert issued by Frederica Kleist of A.C.S. and the Portage Canal Society. Back in 1981, the corps and the city of Portage entered into an agreement to carry out a flood control plan which would include the rehabilitation of the Wisconsin River lock on the Portage Canal. Now, however, the corps is proposing an alternative plan which would place a levee between the lock and the river and leave the lock to die, so to speak, on the vine. The original agreement, the corps now alleges, was based on an erroneous assumption about the amount of work and equipment that would be needed to make the lock walls strong enough to withstand the force of a major flood.

Meanwhile, the corps is also proposing to dismantle the locks on the lower Fox River. It estimates that dismantling would cost \$4 million, while restoring them to reasonable operating condition would cost \$20 million. State and local agencies are prepared to take over operation of the locks, but only if the corps first puts them in repair.

Wisconsin's two senators, Robert Kasten and Herbert Kohl, have introduced legislation to create a National Fox-Wisconsin Waterway Corridor. A.C.S. members wishing to support this proposal can write to the senators at Suites 110 and 330, respectively, Hart Senate Office Building, Washington D.C. 20510.

CANAL BIBLIOGRAPHY PUBLISHED

by William Dzombak

Canal buffs and scholars now have available a new tool that will facilitate inquiries into canal history and technology. Dr. Albright Zimmerman has compiled a 187-page, 22,000-entry listing of printed publications that deal with all aspects of canal construction, operation, use, and demise. The items selected for inclusion in the book range from multivolume bibliographic and general reference works to brief notices, in newspapers and periodicals, focused upon some particular but noteworthy fragment of canal information.

Most of the entries deal with canals in the United States and Canada, but you will also find listings for two dozen foreign countries and most continents. Canals of all ages are referenced—ancient, medieval, renaissance, modern. No index is provided to expedite lookup, but the table of contents reveals that the bibliography was organized by grouping citations according to geographic location of canals referenced: readings pertaining to a given state (or foreign country) are listed under the name of that state. The names of all canals are *not* listed and keyed to state locations, so anyone using this bibliography is expected to know in which state a canal of interest is located.

Dr. Zimmerman anticipates that the next edition of the bibliography will contain cross-references and perhaps annotations that will speed searchers directly to item of interest. The author also cautions that this first edition of "a work in progress" is not complete. Some serial publications have not yet been scanned for additional citations—for example, the publications issued by the canal societies of Virginia (*The Tiller*) and Ohio (*Towpaths*) have not yet been examined.

AMERICAN CANAL SOCIETY

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Other publications: *The Best from American Canals*,

William H. Shank, editor and publisher.
American Canal Guides,
William E. Trout III, editor and publisher.

Dr. Zimmerman, a professor of history at Rider College, is one of the charter members of the Pennsylvania Canal Society and is also an A.C.S. member. An avid student of early transportation systems, "Zip" Zimmerman has channeled his unrestrained enthusiasm into the production of the first comprehensive collection of references to the literature pertaining to all of the canals of the Americas, with additional leads to the literature of foreign canals.

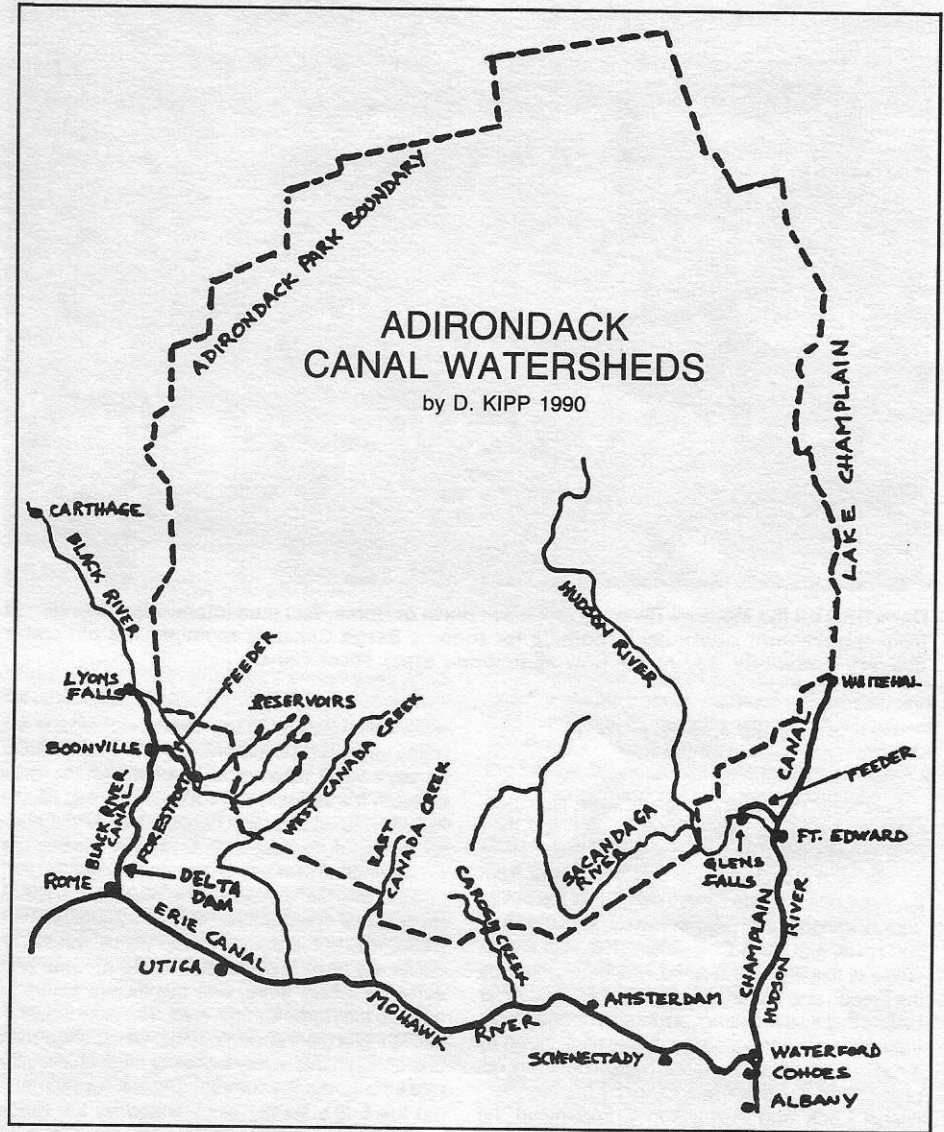
The bibliography has been printed legibly on 8½ by 11 inch paper and firmly bound, with a flexible, clear acetate cover. The book may be obtained by sending \$24.95, plus \$4.00 for shipping, to the Canal History and Technology Press, Hugh Moore Historical Park and Museums, P.O. Box 877, Easton, Pennsylvania 18044. Any income in excess of printing costs will be donated to the Pennsylvania Canal Society collections fund.

ADIRONDACK WATERS: LIFEBLOOD OF CANALS

by David L. Kipp

New York is one of the few states to have still in operation a direct descendent of an inland waterway built during the canal-building craze that flourished in the second quarter of the 19th century. At that time, canals (called "internal improvements" along with roads and railroads) were seen as ways to link together regions of our then-expanding country, making it easier and cheaper for commerce to flow westward. For example, Philadelphia wanted to be connected with Pittsburgh on the Ohio River; the state of Ohio, to connect its namesake river with Lake Erie as did Indiana by way of the Wabash River; Illinois desired to link Lake Michigan with the Mississippi by way of the Illinois River; New Jersey, the Delaware River with New York Harbor; and Maryland, Chesapeake Bay with the Ohio River. These and other states caught the fever and built canals or canalized rivers to bring produce or raw materials from the hinterlands to manufacturing cities and ports of export in hopes of generating an economic boom.

New York's Erie Canal, linking the Atlantic Ocean via the Hudson River to the Great Lakes at Buffalo, was the only one that in one continuous pathway truly pierced the Appalachian Plateau between the eastern seaboard and the interior midwest. It was the first completed (1825) among the major long-distance canals and was an instant and long-term success. Its tolls not only paid for its own construction, operation, and upkeep, but also subsidized construction and maintenance of a half dozen economically unsuccessful branch canals in New York and an Erie Canal enlargement to keep up with growing traffic, which did not peak until after the Civil War. By then, the competition from railroads was sending all but a few of America's canals into bankruptcy and abandonment. The railroads first lured away passenger traffic, then light freight, and were making inroads into heavy bulk cargos. Initial improvements made on



Black River Canal, Lock 64—top of the Boonville Gorge looking south. The canal here began a steep descent from the summit level down to the Mohawk River valley carrying water tapped from the Adirondack foothills ultimately to the Erie Canal at Rome.

the Erie Canal attempting to prevent defection of shippers to railroads were: doubling of locks and widening of aqueducts to prevent bottlenecks; and widening and deepening of the canal bed to allow bigger barges to be used. Later, locks were lengthened to permit two barges to be locked in tandem; mechanical changes to the locks and gates were tried to reduce the time of each lockage. However, as the 20th century approached, New York, now desperate to keep freight on the canal, eliminated tolls and began a second enlargement. But it was soon realized that this was only a Band-Aid and that what was really needed was an end-to-end modernization to complete the transition from the age of human and animal power to that of steam and electricity. Thus the New York Barge Canal system was born—constructed between 1903 and 1918. It remains little changed today.

Whether it was the original Erie (often called Clinton's Ditch for Governor DeWitt Clinton, its chief promoter), or the enlarged Erie which existed from the 1840s to 1918, or today's Barge Canal system, an adequate, dependable water supply was and is absolutely essential to canal operations. This is where the Adirondack watershed comes in.

A canal without an adequate water supply is like an automobile without gasoline—useless for its intended purpose. Erie Canal surveyors and

engineers in their determination of the canal route considered not only the lay of the land but also water sources and feeders along the way, especially for the highest or summit levels.

In New York State, builders of the Erie and some of its branch canals were blessed by geography and topography with two major water sources that made the canal system possible: Lake Erie and the Adirondack Mountains. Lake Erie, which is over 500 feet higher than the Hudson River at Albany, supplies the western end of the canal with what would seem to be an infinite supply if it were not for the fact that it's not downhill all the way to Albany. After reaching a low point near Syracuse, it is necessary to surmount the divide between the Great Lakes and Hudson/Mohawk river watersheds in the vicinity of Rome, New York, before descending through the Mohawk valley to the Hudson River at Cohoes. It is to this summit level and the remaining section of the Erie Canal eastward that the Adirondacks supply their precious waters so vital to the Erie's success. The Adirondack streams supplying the Erie directly are East and West Canada creeks and Caroga Creek. In the past, the Black River and some of its tributaries also supplied water by way of the Black River Canal.

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ADIRONDACK WATERS: LIFEBLOOD OF CANALS



Delta Dam on the Mohawk River—a few miles north of Rome, this dam impounds the drainage from the western Adirondack foothills for today's Barge Canal. It replaced the old water delivery system by way of the now-abandoned Black River Canal.

(Continued from Page Three)

Two New York branch canals were also inextricably linked to Adirondack water for their operations—the Champlain and the Black River canals. Both received 100% of their water from the Adirondacks. The Champlain Canal lies in that ancient transportation corridor which links the Hudson River with Lake Champlain. The vital importance of this link to the north was highlighted by the French and Indian War and Revolutionary War battles that swirled along its route at Ticonderoga, Lake George, and Saratoga. It was recognized as a natural water transportation route in an early but unsuccessful attempt at a canal by the Northern Inland Lock and Navigation Company in the 1790s. So when the Canal Commission headed by DeWitt Clinton planned New York's original canal system, the Champlain was included as a branch canal to be constructed concurrently. The Champlain was completed shortly before the Erie (1823) and its direct descendent continues today as part of the modern Barge Canal system. The Adirondack water it used came primarily from the Hudson where it was tapped above Glens Falls and directed eastward to the Champlain Canal in a 12-mile-long navigable feeder. Today, the Champlain uses the Hudson River itself as the canal from Albany to Ft. Edward and depends on the Glens Falls Feeder to supply its summit and the descent to Whitehall on Lake Champlain, thus continuing its dependence on the water released from the Adirondack Mountains.

Black River Canal

The Black River Canal is a bit of a different story. When the Erie Canal's early success brought boomtown status to such places as Buffalo, Rochester, Syracuse, Utica, and Schenectady, it generated considerable envy on the part of nearby districts where it was thought that a canal would also bring automatic economic prosperity. The people of the Black River valley, which lies on a north-south axis between the Adirondack foothills north of Rome and Watertown near Lake Ontario,

were no exception. They petitioned Albany for many years for a canal link to the Erie and many surveys were taken and alternate routes considered. It was finally approved by the legislature in 1836 and construction began. The deciding factor for this authorization was not necessarily the persistence of the Black River settlers but the fact that the Erie Canal needed the water that a Black River Canal could deliver. Before the Black River Canal was completed, the Erie Canal would occasionally have to shut down in late summer and early fall when there was insufficient water to operate the Rome summit level. The Adirondacks, acting like a giant sponge, retain winter snow melt and spring rains, slowly releasing them at a steady rate throughout the summer and fall, supplementing the Erie's supply when linked by the Black River Canal.

The Rome summit level must have sufficient water supply to provide for lockages in both east



Black River Canal Combine Lock—one of several sets of combines on this "mountain goat" canal which had 108 locks compressed into a mere 35 miles as it surmounted the divide between the Mohawk and Black River valleys. The sign reads, "Black River Canal—1837-1922—Connected Mohawk Valley with Black River country opening up 90 miles of navigable waterway."

and west directions (each lockful of water is eventually lost to the canal when it reaches the lowest point) and make up for losses. Even on the old Clinton's Ditch, each lockage required 125,000 gallons of water (for a typical lock of 15-foot width, 90-foot length, and a lift of 10 feet) and traffic often exceeded 100 boats per day passing a lock. This ongoing operational need plus additional losses due to surface evaporation, seepage, gate leakage, and overflow (some water must be allowed to flow over the waste weirs to maintain the canal at the proper level) meant that large volumes of water must continually be supplied to the summit level. Adirondack water from the Mohawk River supplemented by the Black River Canal was thus a key to maintaining canal operations.

The Black River Canal was begun in 1838, suffered through a stop-work period when New York State experienced a shortage of funds, and was finally completed in 1855. Its junction with the Erie Canal was in Rome. From there it paralleled the Mohawk River, branching off to follow the Lansing Kill up the Boonville Gorge across a tongue of the Tughill Plateau, arriving at its summit level at Boonville. It then descended into the Black River valley to meet the river at Lyons Falls. The river was by 1861 made navigable as far north as Carthage. The Black River Canal is justifiably called the "mountain goat" canal as it had 108 locks in 35 miles (3 locks per mile). Compare this to the original Erie's 83 locks in 363 miles (4.4 miles per lock). Many of the abandoned locks can still be seen along Route 46 between Rome and Boonville and along Route 12 north of Boonville.

Summit Level Supply

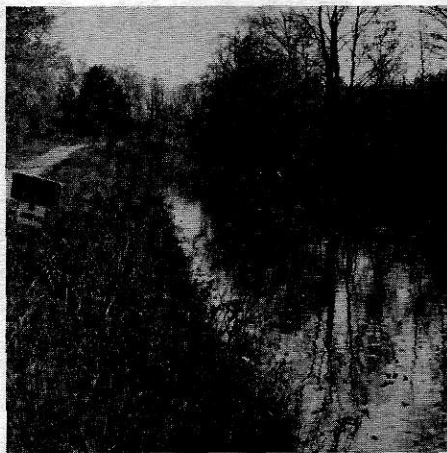
To supply the summit level of the Black River Canal, the Black River was dammed at Forestport and a 14-mile-long navigable feeder was dug from there to Boonville. This feeder can still be traversed today by canoe, and its towpath is an excellent hiking or cross-country skiing trail. Water in excess of the needs of the Black River Canal was allowed to flow into the Lansing Kill and from there to the Erie Canal by way of the Mohawk River. As traffic on the Erie increased during the middle of the 19th century, the Black River proved insufficient in dry years and several Adirondack lakes were dammed to make reservoirs that could release water when the Erie was in need. These bodies of water included Woodhull, Bisby, Twin, North and South Branch, Sand, Canachagala, and White lakes. This water supply route continued to function well into the 20th century when the Mohawk River was impounded by Delta Dam and Lake. These were built north of Rome to supply the much larger needs of the modern Barge Canal completed in 1918. By then the Black River Canal had already lost the battle with the railroads for shipping the region's lumber and ceased operations in 1925. It was because it was a channel for bringing Adirondack water to the Erie that it lasted as long as it did. Other New York branch canals like the Genesee Valley, Chemung, Crooked Lake, Chenango, and Onieda Lake canals were abandoned in the 1870s due to expenses far exceeding revenues.

It is interesting that Verplank Colvin, the renowned surveyor and cartographer of the Adirondacks, by virtue of his intimate knowledge of the headwaters of all the streams that exit the mountain massif, had strong ideas about the channeling of the mountains' vast water reserve. In his report to the legislature for 1874-79, he reiterates the canal system's dependency on the Adirondacks:

"In New York the great canals . . . are all of them, on their upper levels, dependent upon the Adirondack region for water supply; so that, but for the feeders from the streams of the wilderness, the canals themselves would be impracticable." [Verplank Colvin, *Topographical Survey of the Adirondack Region: Report to the Legislature 1874-79* (Weed, Parson & Co., 1880), p. 329.] In an earlier report, Colvin promoted a remarkable visionary scheme for sending water from the high Adirondack lakes to the canal or waterway most in need (including the St. Lawrence):

"The amount of water available from the wilderness for each of these canals (Erie, Black River, Champlain) is nearly equal, and may, by means of skillful engineering, be made extremely equitable in its distribution, in a manner which the peculiar character of the region renders possible, and which—though at first apparently astounding—is actually simple. The barometrical leveling of my survey in showing the altitudes of lakes has developed most important facts. It has been found that the interlocking headwaters of the rivers, flow often, for great distances in opposite directions and at considerable differences of elevation; while the topography of the intervening country after examination of the defiles and ravines has been found to frequently admit of the construction of connecting canals; so that with aid of carefully arranged dams and reservoirs the water could be made to flow in either direction. Thus a single mind at the Capitol of the state, may control by telegraph the flow of numerous and considerable rivers; and at the tap of the key, turn so many million cubic feet of water from the St. Lawrence to the Mohawk, the Hudson, or to Lake Champlain! Such a proper system of reservoirs in this commanding position would prevent the stranding of boats in one canal for lack of that water which at the same instant might be swelling in floods through the affluents of the rivers feeding the others—by excess of rains on the distant watersheds—and would afford to each the quantity to which its commerce and its importance entitle it." [Topographical Survey of the Adirondack Region: Report to the Legislature 1873/74 (Weed, Parson & Co., 1874), pp. 104-05.]

Certainly, Colvin's reports emphasizing the rôle of Adirondack forests in supplying a steady flow

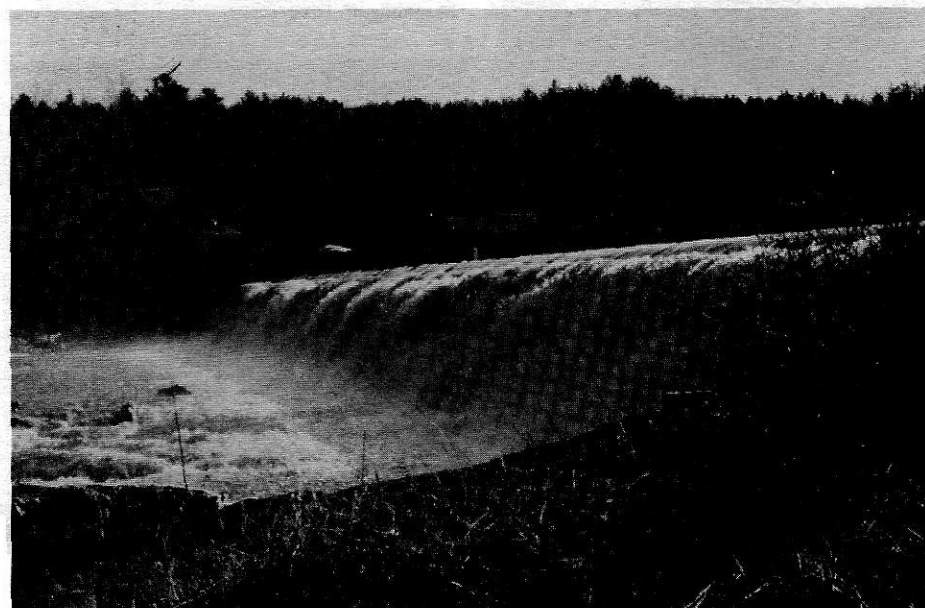


Black River Feeder Canal—Through this channel, the waters of the Black River and an array of mountain reservoirs provided enough water to operate the Black River Canal and keep the Erie Canal's summit level watered in dry years. It carried the water from a dam at Forestport 14 miles to the summit at Boonville. It is still navigable today, at least for canoes, and the towpath is in great shape for hiking and cycling.

of water to three of New York's canals were a factor when the 1885 law establishing the Adirondack Forest Preserve cited this as one of the reasons for maintaining the forests intact. Shippers who were in favor of the law may not have been so much devoted to the forests as interested in a healthy canal system that gave them a hedge against high railroad rates.

The fact that Colvin's schemes of interconnected, telegraph-controlled headwaters never came to fruition does not diminish the ongoing rôle of the Adirondack watershed as the supplier of the lifeblood for New York canals, past and present.

[David L. Kipp is an engineer with Eastman Kodak. He is a member of the A.C.S. and several regional canal societies. His writing has appeared previously in American Canals.]



Black River Feeder Dam—Along with several upstream tributaries dammed as reservoirs, the water flowing off the shoulders of the southwest Adirondacks into the Black River drainage was here sent by a 14-mile-long navigable feeder to the summit level at Boonville. From there it descended through the Black River Canal joining the Erie Canal at Rome.

NATIONAL RECREATIONAL TRAILS FUND ACT

[The following exchange of letters will be of interest to A.C.S. members, especially those with memberships in other organizations which might also wish to endorse this proposed legislation.]

William E. Trout III, Ph.D., President
American Canal Society

Dear Dr. Trout:

This year, as Congress considers a major highway bill to pour tons of concrete and lay more asphalt, those who enjoy nature and the outdoors should be pleased to know that there is something in the bill for them, but it needs your support.

The "National Recreational Trails Fund Act" has been included in the Senate's omnibus transportation bill. Recommended in the 1987 Report of the President's Commission on Americans Outdoors, the Trails Fund Act mirrors the successful Aquatic Resources (Wallop-Breaux) Fund (which taps boat fuel taxes), creating instead a \$50 to \$75 million trust out of unrefunded "nonhighway recreational fuel" revenues. The trust's balance is dispersed annually to the states for recreational trail needs.

Trails are our access ways to nature, scenic beauty, wildlife and the great outdoors. And yet, a poorly maintained trail can damage vegetation, destroy wildlife habitat, increase soil erosion and add sediment to streams. The Trails Fund Act would help keep our trails in good condition, but the bill will only make it to the President's desk if it has the support of trail users nationwide.

That is why an endorsement from your organization is needed and would be much appreciated as a step toward making this legislation a reality.

Sincerely,
Steve Symms

The Hon. Steve Symms
United States Senate
Washington D.C. 20510

Dear Senator Symms:

As president of the American Canal Society, I want to offer our support to your Senate Bill 2150 to establish a National Recreational Trails Fund.

The American Canal Society, "Dedicated to historic canal research, preservation, restoration and parks" was established twenty years ago to serve as a medium of exchange between the nation's state and local canal societies and individuals concerned with the wise use of America's historic canal resources. There are thousands of miles of historic canals and inland waterways in this country, some dry, some watered, some urban, some rural, and there are many dedicated people working to use these historic assets to create parks, trails and open space. Canals and waterways, being linear, are ideal corridors for recreational trails of all kinds, from hiking and biking to canoeing, and along these canals are locks, aqueducts and other works as special points of interest—the Ancient Castles of the New World.

We would be glad to work with you and to assist the National Trails Advisory Board.

Sincerely yours,
William E. Trout III

LIFE MEMBERS

Our official Life Member count now stands at 75. Check with Chas. Derr to find out how to join this special group.

MUSKINGUM RIVER NAVIGATION SESQUICENTENNIAL



Muskingum River Parkway headquarters hides among the trees at Lock #10

When the Ohio-and-Erie Canal was finally completed in 1832, and the Ohio River system was navigationally connected to the Great Lakes, the canal commissioners of Ohio may have felt that they could relax, at least momentarily, and contemplate the impressive results of their efforts. It was not to be, however. Without a pause, citizens whose interests lay within hailing distance of the canal began pressing for the construction of branches which would connect them with what it appeared would soon be the mainstream of commercial activity in the state. Among those most difficult to ignore were the residents of the Muskingum Valley. This was one of the earliest areas of settlement in Ohio, and remained one of the most prosperous, with substantial marketable surpluses of grain, tobacco, linseed oil, and other agricultural products, and bracketed between the busy processing and commercial centers of Marietta, at the confluence of the Muskingum and the Ohio, and Zanesville, at the Muskingum's approximate head of navigation.

Side Cut to Dresden

Even before the canal was open to navigation over its entire length, the politically potent Muskingum interests had successfully petitioned for a side-cut to Dresden, a Muskingum River town 16 miles above Zanesville. The effect of this, evidently unforeseen, was to divert upper Muskingum Valley produce from Zanesville to Cleveland. The next petition, therefore, was for the canalization of the river between Dresden and Zanesville.

The new waterway prospered for a time, but the development of alternative means of transportation brought declining use and dwindling revenues, and the consequent postponement of needed maintenance. By 1886, the people of Ohio and their government were happy to be able to unload the whole burden onto the broad shoulders of the army's Corps of Engineers, which, following the constitutional revolution wrought by the Civil War, was rapidly assuming jurisdiction over

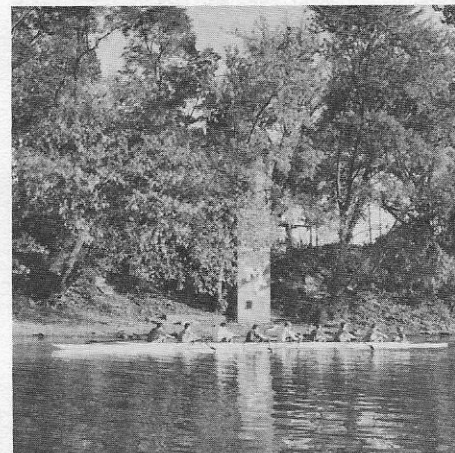
most of the nation's navigable waterways. The Corps attended to the neglected maintenance needs, later added an additional lock and dam (number 11, completed in 1910) above Zanesville, and still later removed lock and dam number 1, at Marietta, when the completion of the Belleville lock and dam on the Ohio River in 1969 made them redundant. Otherwise, the system as it exists today remains much as it was when it was built a century and a half ago.

There was a brief revival of commercial traffic during the period of federal administration, due to the development of coal resources in the Muskingum Valley. The coal ran out during the 1940s, however, and by 1950 there was nothing left but

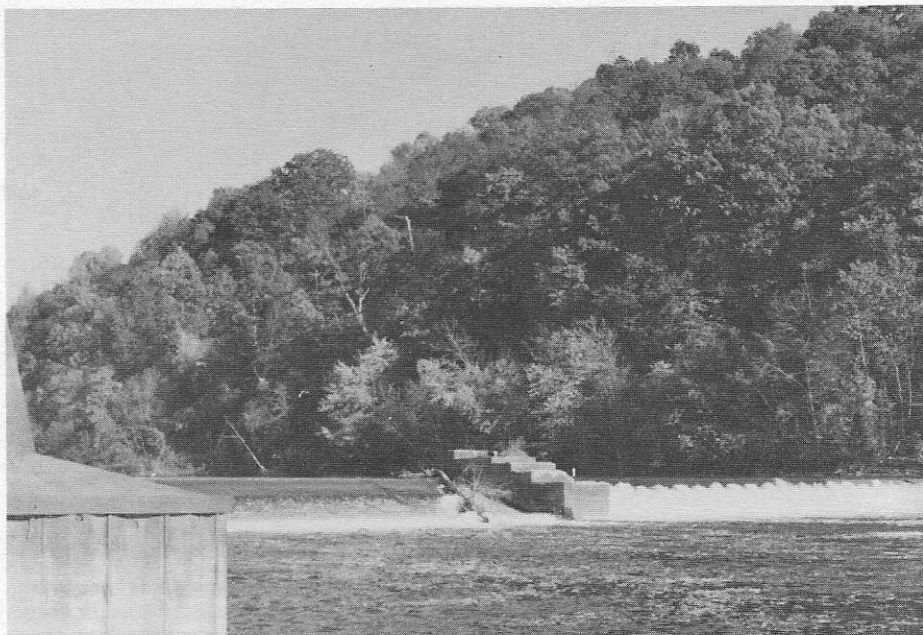
a small amount of upbound sand and gravel on the lower river. The Corps closed locks 2 through 11 in 1952, and lock 1 in 1954, and began to prepare for the demolition of all the structures, allowing the Muskingum to return to its natural state as a free-flowing river.

Recreational boating did not figure into the calculations of the Corps of Engineers, but it is important on the Muskingum. The valley is still densely populated and relatively prosperous. Many river-bank residents are boat owners, and they still know how to get a hearing in the state capital. The result is that the locks and dams were not demolished and instead were returned to state jurisdiction and reopened to traffic as the Muskingum River Parkway in 1958.

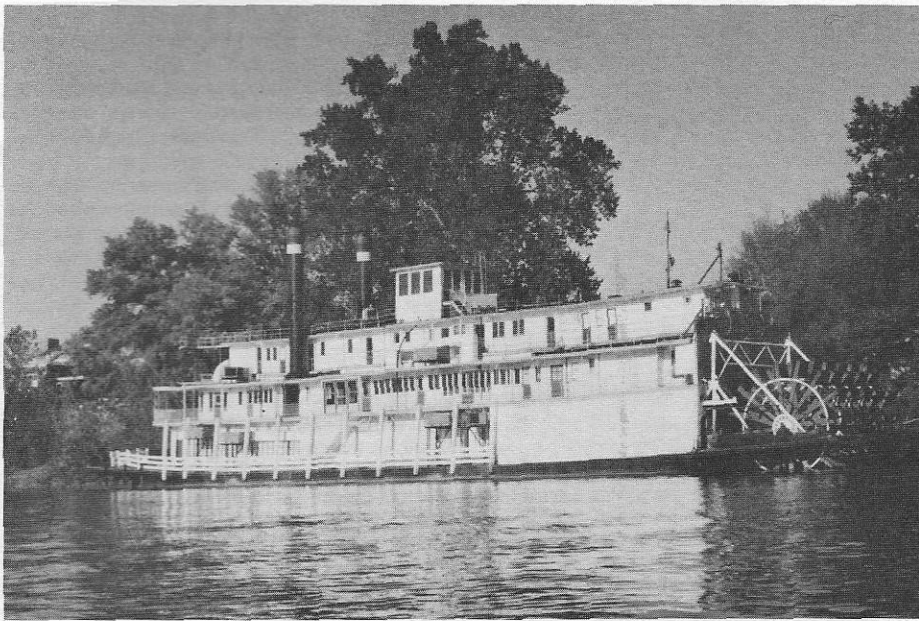
For many years, the State of Ohio operated but did not maintain the navigational facilities, and dilapidation became acute. Over the past four years, however, a major restoration project has been carried out. One consequence has been that although most of the locks were open to local traffic, it was impossible to cruise the waterway in its entirety because one or more of the locks was



The Marietta College crew works out on the Muskingum River.



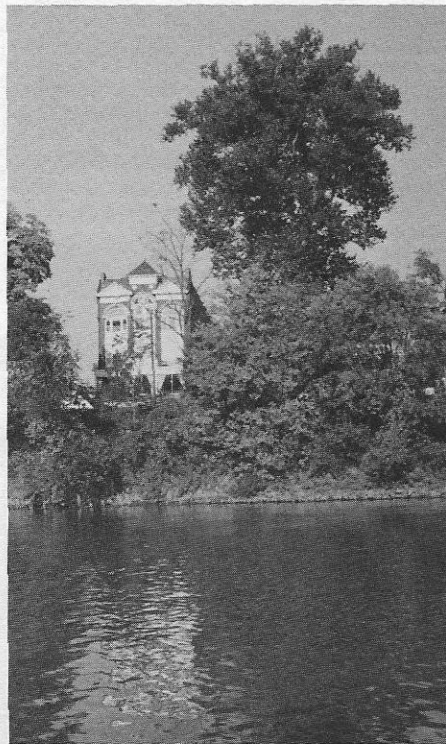
The youngster of the Muskingum navigation system, Dam #11, built in 1910.



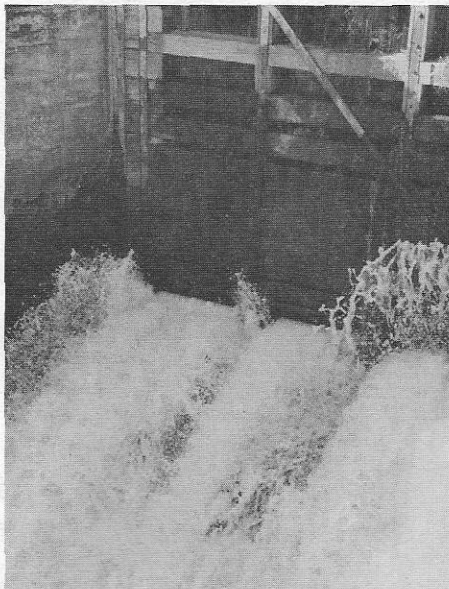
The showboat Becky Thatcher in port at Marietta.

always shut down for repair. Now, however, in 1991, the sesquicentennial year, all the locks will again be open. At the present time, they are operated routinely Friday through Sunday, and by request, on 3-hours notice, Monday through Thursday. Boaters planning a visit should check with the Parkway office for current information (P.O. Box 2806, Zanesville 43702; phone 614 452 3820).

Special events are planned throughout the 1991 boating season. These include living history displays, sternwheeler parades, and workshops dealing with natural history, folklore, and other topics. Special demonstration tours of the hand-operated locks will be conducted on Sundays through July and August at locks 8 and 10. The annual Zane's Trace Commemoration, June 14 through 16, will be dedicated to the Muskingum sesquicentennial this year. The year of celebration will culminate in a gala festival weekend September 14 and 15, with an antique boat show and many other events—the full schedule is not yet available. —DFR



Marietta, the first permanent settlement in the Northwest Territory, abounds in historic buildings.



Before restoration, some of the lock gates could barely hold water. This case in point is at Lock #10, Zanesville.

OLD SANTEE CANAL SPECIAL EVENTS

The Old Santee Canal State Park has issued a schedule of special events for the period July 21 through December 21, mostly on weekends. Those planning to visit the park, especially with children, might wish to obtain a schedule, as preregistration is required. For details, write the park at 900 Stoney Landing Rd., Moncks Corner, SC 29461, or phone 803 899 5200.

MAJOR REHABILITATION ON THE SCHUYLKILL

The two-and-a-half mile segment of the Schuylkill Canal known as the Oakes Reach (in honor of canal engineer Thomas Oakes) is one of the only two that have survived since the canal fell into disuse. The other is the Mont Clare/Port Providence Reach. Both are located in the Mont Clare, Pennsylvania vicinity, in Upper Providence Township, Montgomery County. Both have benefited from the cooperation of the township government, the state Department of Environmental Resources, the Pennsylvania Electric Company, the Schuylkill Canal Advisory Committee, and the Friends of the Schuylkill Canal, in promoting a number of restoration and preservation projects. The most recent of these, on the Oakes Reach, has also drawn in the legislature, through the efforts of state senator Edwin G. Holl. A \$150,000 appropriation along with funds already in the Department of Environmental Resources budget will make possible the fortifying and stabilizing of the 147-foot stone guard wall above Lock 60, which has deteriorated to the point of being undermined. Work is scheduled to begin this spring.

[Information provided by the Pennsylvania Canal Society.]

DELAWARE CANAL STATE PARK

The Delaware Canal, connecting Bristol and Easton, Pennsylvania, became the Theodore Roosevelt State Park in 1940 and the Delaware Canal State Park in 1989. It has just been authorized to undertake a \$2.2 million capital improvement project. The work will include rebuilding the Durham aqueduct and reconstructing a bridge over the canal. The park recently purchased the old lock house at New Hope, and is in the process of refurbishing it as an interpretive center and headquarters for the Friends of the Delaware Canal. Future plans call for the rebuilding of Lock 19 at Lodi.

[Information provided by the Pennsylvania Canal Society.]

CANAL DAYS AT PORT COLBORNE

The Port Colborne Historical and Marine Museum will celebrate "Canal Days" the 3rd and 4th of August, 1991. Located at the Lake Erie terminus of the Welland Canal, the museum is comprised of seven historic buildings furnished with artifacts of the area and its marine heritage. Canal Days is a festival celebrating the maritime character of Port Colborne and the Welland Canal. Arts and crafts, model boat and other marine displays and demonstrations, and food and entertainment are featured. The museum is located at 280 King Street, one mile south of highway 3. Hours are 10 to 5 on Saturday and 12 to 5 on Sunday; admission is \$2, seniors and students \$1.

The museum is open May through December, 12 to 5 daily, admission free except for special events. Afternoon tea, featuring homemade biscuits and jam, is a tradition from 2 to 4 every day but Monday, June through September. To arrange group tours or for further information, call 416 834 7604, or write the museum at P.O. Box 572, Port Colborne, Ontario L3K 5X8, Canada.

[Information provided by the Port Colborne Historical and Marine Museum.]

MISSISSIPPI RIVER MUSEUM THREATENED

by John W. Spence

A long-running soap opera in Memphis-on-the-Mississippi has been "Sidney and the Pyramid," a tale of a smooth-talking promoter brought to the West Tennessee city by well-meaning financiers to make money for himself and the city and county governments by cramming "The Great American Pyramid" with tourist-attracting entertainments. Closely linked in the public's view yet under a separate contract is the management of Mud Island and the Mississippi River Museum.

As this was being written, promoter Sidney Shlenker and his partner, John Burton Tigrett, faced a deadline to substitute \$3 million in cash for common stocks in an escrow fund intended to protect Memphis and Shelby County in the event of nonperformance by the Pyramid Company on the 25-year management contract for the Pyramid. Memphis Mayor Richard Hackett and Shelby County Mayor William Morris has gone to court asking Shlenker & Co. to put up the money by May 16.

Shlenker was introduced to Memphis by Tigrett, a 78-year-old Memphian thought to be worth many millions himself. Shlenker was said to have made a success in Denver with a professional basketball team and to have managed Houston Astrodome successfully for that city's famed promoter, Judge Roy Hofheinz.

It is a tangled story for at least three reasons. First, the construction of The Great American Pyramid, basically a sports arena to seat 20,000

or so at indoor sports events, is under a separate contract which is going well. Second, there is Shlenker's management contract involving securing concessioners, other attractions, and the fittings required for these. Third, and most important in the minds of the minds of many persons in Memphis and the Mississippi Valley, there is the Shlenker-Hackett 20-year contract, signed in the spring of 1989, giving Shlenker virtually unlimited freedom to alter the already-existing complex of attractions on Mud Island.

The focus of this article is on Mud Island and the Mississippi River Museum. These two are indeed inseparable physically. Separate managements for Mud Island's many and varied facilities existed from 1982 to 1989. Mayor Hackett, independently of Memphis' 13-member City Council, decided the city's taxpayers should be relieved of the expenses incurred each year in opening Mud Island to the public. It is probable that, had Hackett asked for council approval at that time, he would have secured it, making moot an issue that arose later, the issue of a Memphis mayor's authority to sign contracts without City Council approval.

Mud Island as the world now knows it was the dream of a highly regarded architect who had designed such successful Memphis landmarks as the International Airport, the Memphis College of Art, the city's most successful department store, public schools, and other elegant buildings. This is Roy Harrover.

From his office windows in downtown Memphis, Harrover, like thousands of other Memphis business people and apartment residents, could

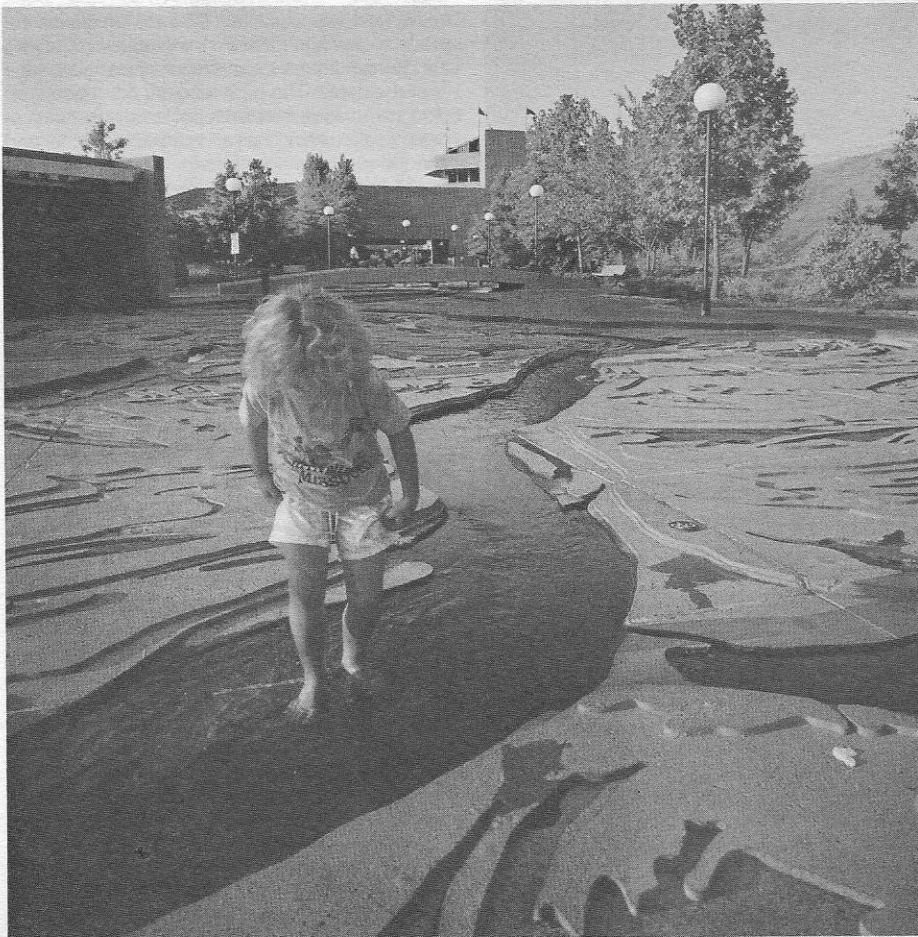
see Mud Island. The island was an unsought gift to the city from the silt-laden waters of the continent's most important waterway, the 2,500-mile-long Mississippi River.

Present on Memphis' doorstep since 1913, the island was always subject to overflow when the Mississippi flooded. Short-season crops and squatters were the main occupants of the mile-long island of some hundreds of acres. After World War II, the island was graced with a modern-day use: a very popular one-runway general-aviation airport. It's major drawback: access, other than by air, was by boat only. No automotive bridge linked Mud Island to the mainland until about six years ago. Wolf River separated Mud Island from the Memphis riverfront, flowing in a southerly course on the east side of the island to join the Mississippi about the west end of Beale Street. About 30 years ago, the city and the Corps of Engineers agreed to divert the Wolf River straight west across the north end of Mud Island, damming the north end of the Wolf's old channel and creating a roadway link on the dam to the island. But this access was so distant, so inconvenient for downtown business people, that use of Mud Island continued to languish, until Harrover had his vision. What he conceived was a unique riverfront, river-oriented park and museum, an ensemble of music, dining, children's and adults' entertainment, and—most important to Harrover and his supporters—the Mississippi River Museum, a unique portrayal of the Mississippi River's history and economic use from prehistoric times to the present day.

Multiple Use Concept

This multiple-use concept has been both the making and the breaking of the Mud Island plan. Harrover overcame the lack of linkage with a magnificent, and costly, monorail passenger conveyor topped by a quarter-mile-long pedestrian walkway. The western terminus of the monorail is the Mississippi River Museum. From that point, ignoring the museum if they chose, Mud Island visitors could walk to shops, restaurants, and a 5,000-seat amphitheater. They could also enjoy the "Riverwalk," a 1,400-foot-long replica of the Mississippi River, accurate in detail, from the junction of the Ohio and the Mississippi to the Gulf of Mexico. Regions west and north of Cairo, sources of the Mississippi, were also carefully depicted in vertical images. Tens of thousands of island visitors have tucked toes into this surrogate Mississippi, or have found and stood upon the miniature sites of their own homes in the cities along the river: Cairo, Carruthersville, Oseola, Memphis, Helena, Greenville, Vicksburg, Natchez, Baton Rouge, New Orleans. Harrover intended the Riverwalk to climax visits to the Mississippi River Museum. "It is an integral part of the museum," Harrover says today. "It's one of the most educational features of the museum as well as one of the most enjoyable features. Managers of the museum should manage the Riverwalk."

Originally, the city set up an independent board to operate Mud Island, its Mississippi River Museum, the shops and restaurants, the marina and amphitheater, and the children's playground. Here began the difficulties. Commercial operators contracted to run the shops and restaurants and to bring entertainment to the amphitheater. The overall operation did not meet both current expenses and capital amortization charges. About 1984, Mayor Hackett asked the City Council to turn management over to a long-established and respected unit of city government, the Memphis Park Commission. The Park Commission at that



Modern museums frequently offer a "hands-on experience." At Mud Island's Riverwalk, however, it is a feet-on experience.

time was less experienced in museum management than it has since become. At that time its major museums were a natural history museum called The Pink Palace, an antebellum cottage, and the Lichterman Nature Center. To its credit, the commission saw its needs and brought about the creation of a semi-independent Memphis Museums Corporation, delegated responsibility, and today oversees an expertly managed museums system.

Alas, it was too late for the Mississippi River Museum to benefit. Separate records of expense for Mud Island's many facets were not kept. Utilities, security, maintenance, staffing, and insurance were not, as far as the public has ever known, prorated among the shops, restaurants, amphitheater, and museum which used them jointly. Attendance records for the museum were kept separately—admission is charged for the monorail and again for entrance to the museum—but that is the only available clue to the popularity of the river museum. It had been popular.

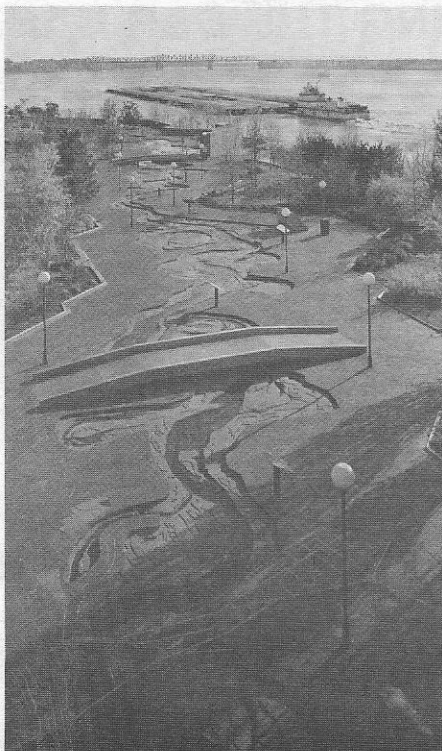
63-Million Investment

What Mayor Hackett saw, however, was a \$63 million investment by taxpayers that was costing more money each year. Beyond anyone's control in the period of Mud Island construction—the mid-70s to 1982—was the nation's worst period of inflation. Construction costs far exceeded first estimates, disgruntling the City Council and the Mayor, and inflating the costs of amortizing bond principal and interest. Mayor Hackett saw in Shlenker a man who could "turn a profit" for the city and himself as boss of the whole of Mud Island, museum included. Some members of the City Council took issue with Hackett's belief that the city charter authorized him—without council approval—to sign away control of a vast city property, Mud Island, for 20 years. The issue was not put to a judicial test, but a referendum on the issue was on the ballot in the fall of 1989, and the voters sided with Mayor Hackett.

Unforeseen in April 1989, when Hackett and Shlenker signed the 20-year deal, was a downturn in the U.S. economy. That trend, coupled with—



The steamboat era receives due attention at the Mississippi River Museum.



The Riverwalk, a scale model of the Lower Mississippi, is one of the most educational and entertaining features of the museum complex on Mud Island.

some say—egregious errors in Shlenker's part, have meant that the sometime Denver basketball magnate failed again and again to borrow the money he needed to make good on his two contracts to develop The Great American Pyramid and to convert Mud Island to a profit-making operation. The Pyramid has been much more the focus of attention for the mayors and the city's only major daily newspaper, the Commercial Appeal.

But it has been Shlenker's seemingly offhand announcements of his plans to break up the museum and disperse its contents among a series of bars, nightclubs, and restaurants which evoked sharp negative responses from ordinary Memphians and two organizations. Private citizens voiced their outrage in calls to Mayor Hackett and letters to the editor. The two organizations, the Mud Island Foundation and the West Tennessee Historical Society, entered the battle to save the museum in the summer of 1990.

Mud Island Foundation

The Mud Island Foundation is a small group of civic-minded Memphians who secured a State of Tennessee charter to support a not-for-profit operation of Mud Island. The group came into being just in time to publish a handsome multi-color "Complete Guide to Mud Island"—and to see its plans of promoting the island and the museum dashed by Hackett's transfer of them to a for-profit operator.

The West Tennessee Historical Society, long established and with hundreds of members, went first to Mayor Hackett and later to Shlenker for assurances that no permanent and irreversible changes would be made in the Mississippi River Museum. Hackett assured all that, at least for one year, no structural changes would be made. Hackett also voiced his disapproval of Shlenker's ideas for mixing bars and museum artifacts.

But a one-year grace period for a multimillion-dollar, unique museum has seemed too little to the

Mud Island Foundation and the Historical Society. Could or would Mayor Hackett renegotiate the contract with Shlenker to return the museum to not-for-profit operation under a quasi-public organization or a joint public-private arrangement?

Hackett's preoccupation with myriad other city problems—from call-ups of city employees in military reserves for Gulf War duty to the successful opening of an exhibit of Russian art (the "Catherine the Great Exhibit") has left this question unanswered.

The foundation and the historical society sought to help answer the question by bringing to Memphis last fall experts in museum design and management from the Zenda Inc. firm in Nashville. Zenda's principals, Charles Phillips and Patricia Hogan, concluded that "[A]lterations currently planned . . . would . . . destroy the integrity of . . . the Mississippi River Museum . . . [and] would also have a detrimental effect on the cultural vitality of Memphis and cause difficulties for the city's other museums." They also pointed out that "The Mississippi River Museum was . . . built around a specific interpretation of the Mississippi River and its environs. The very construction of the building centered around the interpretive plan. This is one of the reasons that the Tennessee Historical Commission's recent resolution was so insistent on keeping the museum as it is in the building it currently occupies."

Photographs by Murray Riss for the Mud Island Foundation, used by permission.

ANOTHER ERIE CANAL GUIDE PUBLISHED

Cruising the Erie Canal and South: A Complete Guide to the Canal, is the title of a recent work by Tom Kranz. It is described as covering the Niagara River, Lake Champlain, the Hudson River, and the canals connected to them. The book may be purchased from Longacres North American Entertainment, 1529 Mill Rd., East Aurora, NY 14052. \$14.94 plus \$2 for shipping plus 8 percent N.Y. sales tax where applicable.

C & O CANAL BOAT TRIPS

The boating season has resumed at the Chesapeake & Ohio Canal National Historic Park. A.C.S. members visiting the nation's capital will want to take time from their hectic schedules of lobbying, legislating, log-rolling, and legal-loophole-locating to slip back in time and enjoy a peaceful and instructive cruise on one of the Park Service canal boats. Both are crewed by Park Service personnel in authentic period costumes and pulled by authentic Park Service mules in their natural state.

The **Georgetown** operates from the Georgetown Visitor's Center at Foundry Mall, 1055 Thomas Jefferson St., in the District. The **Canal Clipper** is berthed at the C&O Museum, Great Falls Tavern, 11710 MacArthur Blvd., Potomac, Maryland, just outside the District. Both vessels schedule 10:30 a.m. and 1:00 and 3:00 p.m. departures Wednesday through Sunday. There are no Monday and Tuesday trips.

Trips include passing through a lock, canal songs, and instruction in the history and legends of the canal. For further information, call 202 653 5844 or 301 443 0024.

[Information by the C&O Canal Association.]

PROTECTING THE D&R CANAL PARK

by James C. Amon

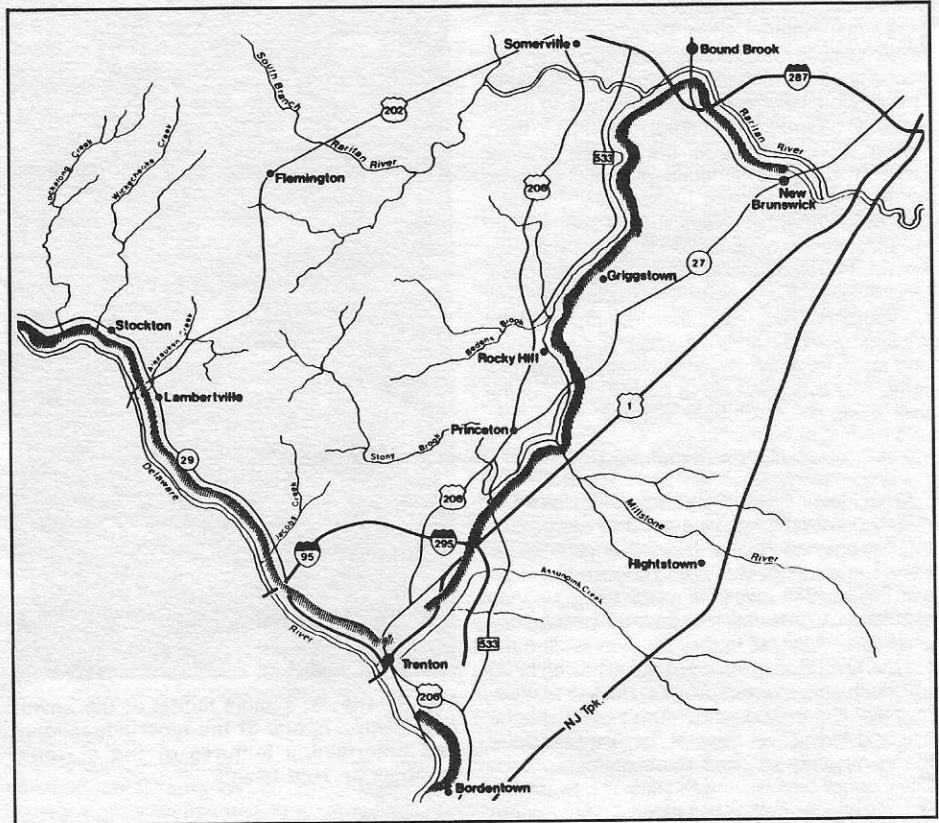
Editor's note: A "news brief" item in our February 1991 issue cited the Courier-News of Bridgewater, New Jersey as the source of information that the future of the Delaware and Raritan Canal "is threatened by uncontrolled and seemingly uncontrollable pollution." James Amon felt that the original article was misleading and that our summary compounded the fallacy. While regretting whatever editorial boo-boos we may have committed, we rejoice at having motivated Mr. Amon to produce the following rejoinder.

New Jersey's Delaware and Raritan Canal was converted in the 1940s to a water-supply system providing water for agriculture and business and as a portion of the drinking water for about one million present-day residents of the Garden State.

When the state legislature decided in 1974 also to make the historic canal (entered on the National Register in 1973) a state park, they realized that there was quite a tangle of government agencies making decisions that impact on the waterway. Their response—not as inane as it may seem at first—was to create a brand-new agency called the D&R Canal Commission. The commission was given the authority to review and approve governmental decisions that affect the canal: it oversees the State Park Service's actions to develop the park, the water supply office's actions to maintain the water flow, and the Department of Transportation's actions on roads next to the park and bridges over the canal, as well as relevant decisions by the four county governments and twenty-two municipal governments having jurisdiction over territory included in the canal park.

The canal commission was also given the authority to review private development that could have a harmful impact on the canal park, whether that impact were on water quality, flooding damage, or the park's visual, ecological, and historic qualities.

For eleven years, the D&R Canal Commission has been administering a land-use regulatory program aimed at protecting the canal and park. The commission has developed stormwater runoff standards for all new development, that are



The Route of the Delaware and Raritan Canal

designed to reduce pollution and lessen the threat of flood damage within the 400-square-mile watershed of the canal. These regulations have been so effective that they have subsequently been adopted as statewide standards for New Jersey, and are in the process of becoming the standard for stormwater management recommended by the American Society of Civil Engineers.

The effectiveness of the regulations in protecting the aesthetic, ecological, and historic qualities of the canal park are a little harder to judge. The main element in this program is a requirement that projects be set back at specified distances from

the park boundaries and that landscape buffers be planted between the projects and the park. Most of the D&R's supporters agree that these regulations have also been effective, with one or two exceptions. These exceptions, however, have motivated the commission to tighten the regulations and increase the level of protection for the D&R Canal Park.

The canal commission's protection program has not been able to do anything about conditions that existed prior to the creation of the canal park. Storm sewers from nearby streets, for example, were directed into the D&R from the time of its construction in 1834, and they bring pollution into the canal. The system also cannot prevent illegal dumping, a problem that parks everywhere in America must face.

The Delaware and Raritan Canal Commission has enjoyed the support of historical societies, environmental organizations, and the general public for its stringent program of protecting the D&R Canal. Developers may not be equally ardent supporters, but eleven years after the program was started, there still has not been a single lawsuit.

[James C. Amon is Executive Director of the Delaware and Raritan Canal Commission.]



Delaware and Raritan Canal State Park: Blackwell's Mills Bridgetender's House and Station. Photo by J. Amon, 1989.

CORRECTION

Notice in the November 1990 issue of *American Canals* of the publication of Frankel & Wiles' *New York State Canal Guide, Western Region*, failed to mention shipping cost. To purchase, send \$19.95, plus N.Y. sales tax if applicable, plus \$2.00 shipping cost, per copy, to Jeremy Frankel, P.O. Box 2414, Glens Falls, New York 12801.

HENNEPIN CANAL CRUISES

Beginning in early June 1991, 2½-hour cruises of the Hennepin (Illinois and Mississippi) Canal will be conducted on board the Hennepin Traveler, departing from the Peppercorn Restaurant at Exit 45, Interstate 80, near Princeton, Illinois. Breakfast cruises begin at 7:30 a.m. and cost \$15.95; lunch cruises, costing \$17.95, depart at 11:30; dinner cruises, at \$19.95, begin at 4:30 p.m. At least initially, all cruises are on Mondays only.

The Hennepin Traveler will be under the command of owner/captain John Vize, a master pilot employed by Heartland Scenic Cruises. Bookings can be arranged through Accent Travel, 800 421 7129.

[Information by the Canal Society of Indiana.]

CANAL BOAT TRIPS IN PENNSYLVANIA

The canal boat Juniata is operating on weekends on a restored portion of the Juniata Division of the Pennsylvania Main Line Canal. Hours of operation are 10:30 a.m. to 5:00 p.m. The boat may be boarded at the Locust Campground, west of Lewistown off U.S. 22. Phone 717 248 3974 for additional information.

One-hour excursions by mule barge are available at New Hope. Departures are at 11:30 a.m. and 1:00, 2:00, 3:00, 4:30, and 6:00 p.m. daily through mid-October. For further information, call 215 862 2842.

[Information provided by Pennsylvania Canal Society.]

ILLINOIS & MICHIGAN CANAL VOLUNTEERS HONORED

Five residents of La Salle, Illinois have been nominated by Mayor Paul Murphy of that city to participate in the National Leadership Forum to be held in Washington in October. The five are Dr. C.R. Jasiek, Roy Kurkowski, Louis Mahnic, John Terselic, and Dr. R.J. Whalen. The nomination is in recognition of their labors to rehabilitate the Illinois and Michigan Canal, a project begun in 1972 by the La Salle Rotary Club and now nearing completion. Disposing of sunken barges and the unsavory if not actually toxic matter produced by dredging the canal are among the challenges which the volunteers have met and continue to meet.

[Information provided by Illinois Michigan Canal Volunteers, Inc.]

INDEX OF NATIONAL GEOGRAPHIC WATERWAY REFERENCES AVAILABLE

In the course of pursuing his interest in canal history, Jeremy Frankel has assembled a three-page, 120-entry listing of waterway references (mostly articles) in the *National Geographic* magazine. Anyone wishing to obtain a copy should enclose a check or money order for \$1.50 with his or her request to Jeremy G. Frankel, P.O. Box 2414, Glens Falls, New York 12801.

CANAL CALENDAR

June 1-2. Canal Days, Saltzburg, Pa. Arts and crafts, slideshows, walking tours, parade, canoe race.

June 9. Annual June tour of the Canal Society of New Jersey: canal towns and railroads on the Delaware & Raritan Canal Feeder. 8:30 a.m. to 7:00 p.m. Cost \$25.00. Contact: Linda House, 214 N. Bridge St., Somerville, N.J. 08876, phone 908 722 7428.

June 14-16. Lockport Old Canal Days, P.O. Box 31, Lockport, IL 60441.

June 15. Delaware Canal walk. Departure from the Canal Museum at Easton, Pa., 9:00 a.m. Contact: Friends of the Delaware Canal, P.O. Box 312, Point Pleasant, Pa. 18950.

June 15-22. Annual James River Batteau Festival, Lynchburg to Richmond, Va. Contact: James River Batteau Festival, Box 790, Columbia, Va. 23038.

June 22. Old Freemansburg Association Canal Day. Flea market, arts and crafts, refreshments, displays and games.

June 29. Lehigh Canal evening lock ride. A 2½ hour mule-drawn cruise, including meal and entertainment. Departure is at 5:30 p.m. from Hugh Moore Park, 200 S. Delaware Dr., Easton, Pa. 18044-0877. Reservation required: phone 215 250 6700.

June 29. Delaware Canal walk, 3rd installment (see above).

June 29-July 7. New England tour of the Canal Society of New Jersey. Includes the Cumberland and Oxford, the Cape Cod, and the Middlesex canals. \$625 includes registration, hotel, meals, and local transportation. Contact: Linda House, 214 N. Bridge St., Somerville, NJ 08876.

July 6. Delaware Canal walk, 4th installment (see above).

July 13. Canal Festival, Hugh Moore Park, Easton, Pa. Arts and crafts, music, canal boatpersons' reunion, live entertainment, rides, food, boat and bike rentals, 10:00 a.m. to 6:00 p.m. (See article elsewhere in this issue.)

July 13. Delaware Canal walk, 5th installment (see above).

July 13-14. C&O Canal Boat Festival. Canal Boat Replica, 5 miles south of Cumberland, Md., on rte. 51. Arts and crafts, music, food, canal and railroad displays.

July 27 and August 17. Lehigh Canal evening lock rides (repeating June 29 event, above).

August 3 and 4. Canal Days at the Port Colborne Historical and Marine Museum, Port Colborne, Ontario.

August 3 to 10. Bicycle tour of the Erie Canal, Lockport to Rome, under the leadership of Bill Huffish, a professor at the State University of New York—Brockport, author of *The Canaller's Songbook*, and a tour guide for Classic Bicycle Tours and Treks. Cost: \$749. For reservations or further information, call 800 777 8090.

August 24. 5th annual Antique Fair at Canal Fulton, Ohio, 10:00 a.m. to 5:00 p.m., with early-bird buyers accommodated from 7:00 to 10:00 a.m. The event is to help support the historical and preservation projects of the Canal Fulton Heritage Society. (Further details elsewhere in this issue.)

October 20 to 23. Second International Conference on Historic Canals. The theme this year is "The Future Echoes the Past: Innovative Uses of Historic Canals." Headquarters will be at the Hilton Inn in Akron, Ohio. To preregister or to propose a paper write to the conference c/o the Cuyahoga Valley Association, P.O. Box 222, Peninsula, Ohio 44264. (Further details elsewhere in this issue.)

JULY FESTIVAL - LEHIGH CANAL

(Continued from Page One)

funnel cake, canal boat rides, and a nostalgic canal boatmen's reunion.

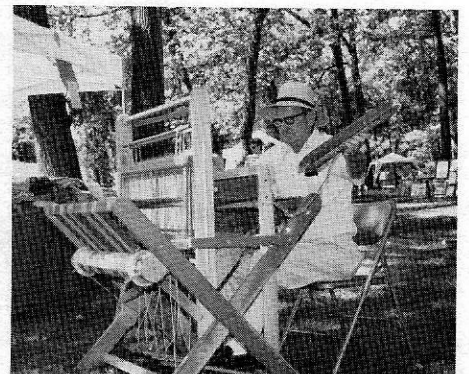
Variety is the keynote of the musical performances which run continuously at separate sites throughout the festival area. These sites include a band shell at the east stage area next to the arts and crafts exhibits in the park's main grove, a band shell in the west stage area at the beverage pavilion, and a performance area on the "Josiah White." The east stage and "Josiah White" will feature a folk music and big band format, while the west stage will feature polka, Bavarian, and Dixieland music.

Admission to the festival is free; there is a parking fee of \$3.00 per car with \$1.00-off coupons available at all Merchants Bank branches and at the Canal Museum. A shuttle bus will be in operation between the various sites within the festival grounds. The parking fee includes a descriptive booklet which contains a complete listing of activities and a map of Hugh Moore Park.

To reach Hugh Moore Park and the Canal Festival, exit Route 22 at the 25th Street exit and follow 25th Street south for two miles. From I-78, follow signs for Route 611 North one mile, turn left

onto Berwick Street to the end, left onto Glendon Avenue, follow brown "Canal Boat" signs. For more information, call the Canal Museum at 215 250 6700.

[Information provided by Hugh Moore Historical Park and Museums.]



Over 75 artists and craftsmen exhibit and demonstrate their skills in Hugh Moore Park's main grove.

Photo by David T. Boyer

THE TRANS-JERSEY SHIP CANAL—A DREAM UNFULFILLED

by Bruce J. Russell, Contributing Editor

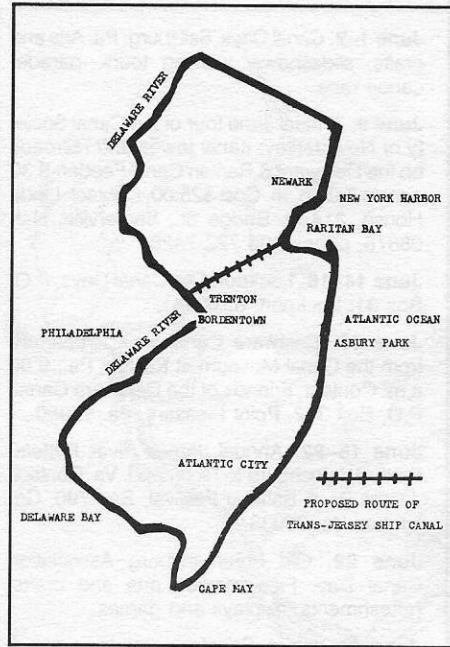
At the beginning of the present century, most of America's old 19th century towpath canals had either gone out of business or were in the process of doing so, victims of technological change in the form of faster and more efficient railroad competition. Nevertheless, there were those who clung to the belief that transportation of goods by water was inherently more economical than rail transport, provided that travel time was not considered vitally important. Bulk commodities such as grain, cement, coal, soda ash, bricks, oil, and even lumber could be moved just as easily by water provided that navigable rivers and canals existed large enough to accommodate vessels in excess of 300 feet. If not bona fide ships, these vessels might be barges commodious enough to handle the equivalent of several railroad freight cars.

Along the eastern seaboard, there were plans to create an intracoastal waterway which would extend from the New York City area as far south as Key West, Florida. Using existing bays and rivers connected by a series of man-made canals and channels, it would be a protected and sheltered route for East Coast shipping. In other words, vessels would not have to venture into the Atlantic Ocean, but instead would travel on the western side of the 1,200-mile-long chain of sand bars and barrier islands which form a series of resort communities stretching from Point Pleasant, New Jersey to the southern tip of Florida, and include Atlantic City and Cape May, New Jersey, Rehoboth Beach, Delaware and Ocean City, Maryland, Virginia Beach, Virginia, and many others too numerous to mention. In order to gain access to them from the mainland it is necessary to travel over bridges or causeways which cross a bay, an inlet, or an estuary of some type. The planners of the proposed intracoastal waterway believed that if these bodies of water could be joined, an efficient coastal route for shipping might be developed. Goods produced in New York City could be loaded onto vessels and transported down the East Coast without the danger of shipwreck or foundering in the open Atlantic, or in time of war, being sunk by enemy submarines. The scheme envisaged a number of ports developing along these bays, complete with machinery for loading and unloading bulk cargoes. Furthermore, the proposed intracoastal shipping route would provide some measure of competition for the railroads which, by the late 1800s, were often controlled by those unscrupulous financiers known as "robber barons."

Army C.E. Surveys

By 1905, the location of the various canals and channels which would link the natural bodies of water had largely been determined. The U.S. Army Corps of Engineers as well as other federal government agencies began doing surveys up and down the coast to determine the specific details of the waterways which would be built using the latest types of dredging and excavating equipment. At the time, New York State was building its barge canal system from Albany to Buffalo as a replacement for the 1850-era Erie towpath canal, and observers were sent to learn first hand the techniques being employed on that ambitious project.

In 1907, an organization appropriately called the "Atlantic Deeper Waterways Association" was formed with the purpose of promoting use of waterways to move the nation's bulk freight and, in certain instances, passengers. Totally in favor



of the creation of an intracoastal waterway from the New York area to South Florida, the group on its own began to survey various routes where it felt canals could economically be excavated.

In certain instances, their proposals differed from those of the Corps of Engineers and other government planning agencies such as the Department of the Interior. For example, in New Jersey the approved route consisted of passage through Barnegat Bay, Manahawkin Bay, Little Egg Harbor Bay, Townsend Sound, et cetera, as far as Cape May, the extreme southern tip of the Garden State. At this point, the waterway crossed Delaware Bay using a buoy-marked shipping channel which took it to Delaware City, Delaware. Here vessels were supposed to enter an enlarged and deepened Chesapeake & Delaware Canal providing access to Chesapeake Bay and ports such as Annapolis, Baltimore, and Washington, D.C. They would never have to enter the Atlantic Ocean



WHAT MIGHT HAVE BEEN. Had the Trans-Jersey Ship Canal been built, it would have been possible to have excursion boats circumnavigating lower New Jersey. Vessels such as this could leave New York City, enter the canal at Raritan Bay, and proceed across central New Jersey to the Delaware River. From here, they could travel to Delaware Bay, go around Cape May, and return to New York via Atlantic City, Asbury Park, and Sandy Hook.

except for a short stretch between Sandy Hook and Manasquan where an inlet led directly into Barnegat Bay and the beginning of the intracoastal waterway. The Atlantic Deeper Waterways Association, however, rather than accept the idea of skirting New Jersey's coast before crossing Delaware Bay at almost its widest point, felt that a more advantageous scheme might be to cut across the Garden State at its narrowest point. In other words, they wanted to create a waterway which would connect Raritan Bay, which is less than five miles from New York's Borough of Staten Island, with the Delaware River at Bordertown, a small community situated a few miles south of Trenton, the New Jersey state capital.

An existing towpath canal, the Delaware & Raritan, had been dug in the 1830s, and when it opened for business was considered the best thing that ever happened for commerce in New Jersey. Goods which had previously been shipped around Cape May could now be diverted onto a safer, protected inland route. No longer would valuable cargoes be lost in shipwrecks. Of course, one drawback was that goods had to be transferred from the holds of sailing ships to the much smaller canal boats. The waterways group proposed nothing less than a replacement of the Delaware & Raritan Canal with a modern waterway capable of handling large ships and barges, in the process eliminating the need to transfer cargoes. They were aware of plans for widening, deepening, and converting to sea level the 19th century Chesapeake & Delaware Canal, in order that it might be used by ocean-going freighters, and believed that the same thing could be done to the Delaware & Raritan Canal in New Jersey. They saw no logic in having a ship leave New York harbor, travel all the way south to Cape May, and then proceed north through Delaware Bay to reach the enlarged Chesapeake & Delaware Canal. Their position was, "Why not take the most direct route and create a waterway for ships to enter Raritan Bay, proceed west toward New Brunswick, and then cross New Jersey at its narrowest point until the Delaware River is reached." Miles of circuitous navigation around Cape May would be avoided. In their opinion, an enlarged, deepened, and widened Delaware & Raritan Canal or a completely new waterway roughly parallel to it was a natural counterpart to a modernized Chesapeake & Delaware. Together the two canals would furnish the shortest, most direct route for ships traveling between New York City and Washington, with stopovers possible in Philadelphia, Baltimore, and Annapolis. Some of their inspiration undoubtedly came from Europe, where an ambitious canal-building program was underway as the 20th century dawned.

The Trans-Jersey Ship Canal, as the scheme came to be known, gained early support from both business and industry. Both viewed the waterway as a practical means of bringing commerce to the Garden State. Raw materials could be cheaply carried to industries, and finished products sent out, at a fraction of the cost of land-based transportation. They wrote of how a century earlier men of foresight and vision had built the original Delaware & Raritan Canal, and that their spirit would guide the creation of a new 20th century version. Further support came in the form of the federal Rivers and Harbors Act of 1909, which called for the creation of an inland, intracoastal waterway from Boston to North Carolina and later as far south as Florida. This piece of legislation was the result of two years of lobbying by the Atlantic Deeper Waterways Association.

(To Be Continued)