"Captain's Corner"

Our first year as the American Canal Society has passed. We have survived - that is the main thing. We are getting most of our first-year members back - and that is a healthy sign. We need to decide whether or not to become tax-exempt - with its advantages and disadvantages, or not. Some of you may wonder what our organization is really like? Mostly a few hard workers, with a few more (are you interested, Secretary Bill Shank, Vice-President/ Treasurer Bill Trout, Committee Chairman Pete Stoeckle, Ed B. and the rest of the committee members, our wives and a few faithful contributors. We need to find better ways to share the load, so that we can spend our time more profitably. Did you know that the Bulletin you’re reading was typed with three fingers by your president? Surely we can find some way to raise a few more dollars so that we can maintain and raise the quality of our society. I would like to think that I could better serve you as your national leader and by offering you quality canal information rather than a typewritten article, particularly when I am not a very good typist.

Please share your ideas about the American Canal Society with me. We will try to incorporate as many of them as possible. I am looking forward to working with you in the second year of the American Canal Society. Tom Hahn

C&O Canal Hike

The Annual Chesapeake and Ohio Canal Reunion and Justice Douglas Hike have been set for May by the C & O Canal Association. The hike will be from Dam No 4 to Shepherdstown (Look 38), a distance of about 12 miles. The Annual Meeting will be at the Western Maryland Sportsmen Club at Dam No 4 and the banquet will be at Shepherd College in Shepherdstown, West Virginia. Details and reservations from Ms Bonnie Troxell, 612 Montgomery Ave, Cumberland, MD 21502.

How old is "Old"

The subject of the antiquity of various of the American canals has come up several times in recent correspondence with ACS members and in recent canal articles and books. We touch on the subject in the review of Alder’s "Dieseal Swamp Canal."

Without being victims of the "Columbus discovered America disease" Bill Wilson puts it, I think it would be interesting to have an exchange of ideas on this subject.

What should the basis of antiquity be? A proposal? First chartered? First to begin construction? First to carry traffic? We await your comments.

Ohio Society Field Trip

The C&O has a tentative tour scheduled for the western portion of the Sandy and Beaver Canal in the fall. Verification and further details will be included in the next issue of American Canals.

Canal Periodicals Index

The canal periodicals index committee, under the chairmanship of Ed Boss of 304 W. McMurtry Rd, McMurtry, PA 15377 is beginning to move. The primary function of the committee is to determine the extent of indexing of periodicals to help with the indexing (and if none has been done) or help bring the extant indexes up to date; and, somehow make the individual indexes available to all interested parties, i.e., members of other societies. The committee is concerned only with periodicals published by canal organizations. Another ACS committee is needed for indexes of publications that only occasionally have material on canals. There is also a separate ACS committee on bibliography under the chairmanship of Harry Rinker.

More help is needed. If you would like to help with the indexing of any particular canal publication (periodical) or assist in other ways, please write to Chairman Ed Boss.

New ACS Directors


Mr. Brown is a well-known author of the canals of Virginia. Mr Atkinson is a Member of Inland Waterways Advisory Council of England who has an active interest in the American canals as well as those of the United Kingdom.

ACS Directors are ex-officio members of all standing committees. We will include a list of directors and addresses in the next bulletin.

Rideau Canal Field Trip

The Society for Industrial Archeology has invited members of the American Canal Society to participate in a field trip to be held in September. The fall event will feature a land and water tour of the Rideau Canal (focusing on the Jones Falls Site) plus an inspection of industrial buildings in the town of Merrickville and the City of Kingston, both early 19th century. Tour coordinator is: Ms Diane Newall Macdougall, National Historic Sites Service, Ottawa, K1A 0N4, Canada. Trip details are published later.

New York & Pennsylvania Canal Society Field Trip

The Canal Society of New York State and the Pennsylvania Canal Society are collaborating on a joint tour of the old Susquehanna West Branch Canal the week-end of May 4, 5 & 6, 1973. The tour route will cover many interesting ruins between Lock Haven and Muncy, Pa. The above photo is reproduced from a very old calendar with title: "Williamsport-Market Street Canal Bridge- a Flyer of the 80’s".

Headquarters for the joint meeting will be the Sheraton Motor Inn, Williamsport, Pa. For further details write Richard L. Mix, 398 Lincoln Ave, Williamsport, 17701.
American Canals

BULLETIN OF THE AMERICAN CANAL SOCIETY

EDITOR-IN-CHIEF: Capt. Thomas F. Hahn
Lockhouse #6, C&O Canal, C.O. Box 639
Glen Echo, Maryland 20768

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"AMERICAN CANALS" is issued quarterly by the American Canal Society, with headquarters at Lockhouse #6, Chesapeake and Ohio Canal, C.O. Box 639, Glen Echo, Maryland 20768. Objectives of the Society are to encourage the preservation, interpretation, and usage of American Canals, past and present; to provide a point of contact for interested individuals; to promote the consideration of threatened canals; and to exchange information of general interest.

Annual subscription to "AMERICAN CANALS" is automatic with a minimum ACS dues payment of $4.00. Individual copies may be purchased by non-members at $2.00.

Highest Canal?

(Following received from ACS member Carrel I. Tod): "I looked through my books on British Canals searching for the highest point reached by an artificial waterway in Britain. This is 69" at the Standedge Tunnel on the Huddersfield Narrow Canal. The highest point currently in use must be the summit level of the Leeds and Liverpool at Four Roads Tunnel, 497 feet. This leads me to wonder what the highest point was on American canals. I suppose it would be one end or the other of the Allegheny Portage Railroad. As much as Lake Erie is already 572 feet above sea level, I would expect that we must have had some canals higher than 697 feet. (The answer was replied by ACS Vice President, Bill Shank): "Highest point on the route Allegheny Portage Railroad was at the top of Plane 6 on the Hollidaysburg side of Allegheny Mountain--2334 feet above sea level, nearly 1400 feet above the level of the canal basin at Hollidaysburg and about 1350 feet above the Johnstown Station at the west end of the route. Since sectional canal boats were actually towed over the mountains, this means that the boats themselves climbed to 2334 feet. The highest watered section of canal the route would have been at Johnstown--about 1185 feet above sea level."

Is this then, the highest elevation of a canal in the world?

French Canals

Earlier this month I once again did a long auto trip in provincial France and I wonder if the members of ACS are aware of the absolute immense mileage of active or only recently inactivated canals in that country. They are a delight and I can recommend. For example, the Ouse is not a Liffey (near Nancy in Lorraine) and Langres, and along many rivers long stretches of tree-lined, grassy canal banks which are bucolic and peaceful. The Michelin maps in the yellow series will, if studied carefully, show any enthusiast where to go. (Submitted by Dennis K NoDaniel)

"Dedication"

What can be achieved by one dedicated man is at times astonishing. James Lee of Stewartsville, NJ, has uncovered what most likely is the only sloop or barker (reaction) hydraulic turbine surviving in the US in situ (only two others known), at the bottom of its 30-foot supply shaft. The 13"-9" diameter turbine, c.1850, powered the winding gear of (inclined) Plane No 9 west of the Morris Canal. When canal operations ceased in 1924, the shaft above the turbine was filled in as a safety measure. Lee, who lives in the Plane Tender's house, convinced that the turbine was still in place, began several years ago to dig out the shaft and has also cleared the 160-foot discharge tunnel. He is attempting to restore the entire plane, its machinery and a portion of the canal proper. (SIA Newsletter Jan 1973)

ACS Sew-On Patches

We are looking for ideas for a sew-on patch for the American Canal Society which would sell for about a dollar. C-Julski has submitted a design which is Pennsylvania packet boat in yellow and green, a white background, green border and the name AMERICAN CANAL SOCIETY in brown. Any other ideas?

Inland Waterways

Amenity Advisory Council

The Inland Waterways Amenity Advisory Council is a body consisting of a chairman and not less than 12 members appointed by the Secretary of State for the Environment. In celebration of the tenth anniversary of the Inland Waterways Board, the Council has appointed a new chairman, J. M. Atkinson, MA, of a member of the council. Under the watchful eyes of the Council are at least 1,400 miles of operating cruiseways with 1,100 locks, at least 267 aqueducts, about 40 tunnels and thousands of bridges. One of the chief concerns of the Council is the several hundreds of miles of remainder waterways, much of which needs to be restored.

Pilgrim Canal Trip

In the November/December 1972 issue of Holiday Magazine, on page 79, is an article about Leyden, Holland, which was the home of the Pilgrim Fathers before they embarked on the Mayflower for America. The pilgrims traveled by canal from Leyden to Delfshaven (now part of the massive Rotterdam port) and there embarked on the chartered ship Speedwell for America, changing course on the barque Mayflower at Plymouth, England because the Speedwell proved unsatisfactory. (Alan Dietch)

A small cruiser on the Llangollen Canal (England) passes over Telford's magnificence of aqueduct at Pontcysyllte -- 120 feet above the Dee Valley. This fine photo is published in "The Last Ten Years", issued in January 1973 by the British Waterways Board. We are indebted to Sheila Dogg of IWB for a copy of this fine booklet, which adds: "Great news! We have been reproved by the Board and will not be disbanded after all." The British Waterways Board last month celebrated its tenth anniversary with appropriate ceremonies. For information on IWB, and its publications, write Sheila Dogg, Press and Publicity Office, Malvern House, Malvern Terrace, London NWI 6JX, England. Also available is a beautiful, four-color canal calendar.
THE DISMAL SWAMP CANAL

(Editor's Note: The title above is also the title of a book written by Alexander H. Brown, published by the Albemarle and Chesapeake Canal Company andense of a special design were put into service. To navigate the narrow canal, the barges were required by law to be only 12 feet wide, but they were 65 feet long and carried 10 tons of freight. Cargo was loaded onto the barges at a loading dock located at the head of the canal in Roanoke Rapids City. Two men, one at the front to steer and one aft to pole the boat, navigated the canal. The process was repeated for every lock, two round trips a day. Larger boats waited below the third lock to receive the freight and carry it to seaports on the Albemarle Sound.

The prosperity of the Roanoke Navigation Company was supported by North Carolina's first railroads being built across the canal. Freight loaded aboard a railroad freight car in Weldon could reach the deep water port of Roanoke before the canal. Freight could reach a shallow water port on the northeastern coast, where it was shipped to coastwise boats to Norfolk. By 1840, canal traffic slowed to the point that it was cheaper nearly 50 feet closer to the canal. By the beginning of the War Between the States only a few barges were in service.

For the first few months of the war every vessel capable of floating was pressed into food stuffs and war materials for the Confederate forces in Virginia were shipped. Through the canal and down the Roanoke River were shipped 50,000 tons of cotton. By 1865 the canal was closed. The state of Virginia was forced to suspend operation for the period of profitable operation for the canal. In 1874, the last commercial canal was closed. In 1879, the last commercial canal was closed. In 1879, the last commercial canal was closed.

Today few traces remain of the once important canal except for a few hundred yards of it that carry water to manufacturing plants. One reminder is the beautiful stone aqueduct which carried the water near the eastern side of the canal. This aqueduct was still in use in 1937. The navigation company was declared bankrupt.

Lehigh Canal Flood Damage

Damage was sustained in several areas by Hurricane Agnes:

a. Lehigh Gap Dam and inlet works to canal and towpath through Boro of Walnupport were severely damaged. Repairs to restore flow were completed late October, is some trim and dressing to be done at a later date.

b. Hokayasqua Dam and inlet works to canal, excessive siltation and debris and abandoned work. Repairs to restore flow through the canal in North Catasauqua and Hanover Township and Catasauqua. This work was completed late October, is some trim and dressing to be done at a later date.

c. Allentown-Bethlehem, massive breach in the towpath drained the canal and diverted water from several levels downstream. Repairs to restore flow were completed late October, some trim and dressing to be done at a later date.

d. The engineered flood control works and impoundments in the Lehigh River Basin proved their worth in this hurricane.

Information, Please!

Alexander C. Brown of 228 James River Dr., Newport News, VA 23601 is following the Dismal Swamp Canal study with a similar history of the Albemarle and Chesapeake Canal, which the Norfolk County Historical Society will sponsor. Although never a towpath canal, it has several things which should attract the interest of canal history enthusiasts. The locks at Great Bridge completed in 1925 was one of the last in the country, measuring 220 feet long by 40 feet wide. Being a guard lock to check the tide, it is the only double-gated lock in the nation, although the lift and elevation are the same.

Mr. Brown says, as well along on my book on the Albemarle and Chesapeake Canal and would appreciate information on or copies of the original plans for the guard lock at Great Bridge, Virginia, in its original state, i.e. before the present 1932 lock was built by the Army Engineers.

Lehigh Canal Flood Damage

The Weldon Canal, built around the Roanoke Rapids on the Roanoke River in 1834, brought about important economic changes in northeastern North Carolina. It helped arrest the economic boom in the area and brought prosperity to the region.

The numerous rivers and swamps made road-building extremely expensive, so there was no satisfactory overland passage to the coast except by water. The Weldon Canal was not the sole means of freight movement along the Roanoke Valley. Barges that had been abandoned for four years were repaired and some new craft were built. With the resumption of regular river service in 1877, the navigation company was declared bankrupt.

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Roebling Aqueduct-ASCE Historic Landmark

The Roebling Aqueduct across the Delaware River, from the New York State side, circa 1900, shortly after the Delaware and Hudson Canal had been abandoned. The old structure, still standing today, has been converted into a toll bridge.

On 18 October 1972, The American Society of Civil Engineers, during their Annual Meeting in Houston, Texas, named John A. Roebling's Delaware Aqueduct, over the Delaware River in Lackawaxen Township, Pike County, Pennsylvania, as a National Historic Civil Engineering Landmark. Two decades commemorating the event were then placed on the bridge (one on each side of the river) on Sunday, 12 November 1972, at 2:00 p.m.

The nineteenth-century American civil engineer, John A. Roebling, is best remembered for his crowning work, the Brooklyn Bridge. Although an engineering monument of highest importance, its highest element - the Brooklyn Bridge mast - if historical justice is to be done - share its fame with a small, relatively obscure suspension bridge that was Roebling's third work, and is his earliest still standing. Moreover, in all likelihood, the Delaware Aqueduct is the oldest existing American suspension bridge and may well be the oldest existing suspension bridge in the world (that retains its original elements). Too small to be on the National Register by Mr. Robert V. Vogel, Curator of the Division of Mechanical and Civil Engineering in the Smithsonian Institution.

The aqueduct was built in 1847 for the Delaware and Hudson Coal Company. Its original use was as one of four aqueducts on the Delaware and Hudson Canal. Its present use is as a dual lane vehicular toll bridge. Its length is 535 feet; four span suspension with stone piers; one at 182 feet and three at 131 feet. Its width is 24 feet 4 inches at cast iron saddles; 18 feet 6 inches at roadway. The cables are 68 inches in diameter and other canal-related facilities: 123 pounds tension, 771 tons actual and 3,070 tons ultimate. The hangers are 1/2 inch diameter, double wrought iron rods. The deck is oak timber. The Riblet of Merit was Robert E. Nolan, Jr., Program Chairman, Lehigh Valley Section, American Society of Civil Engineers.

D.H. Canal Historical Society

The museum of the society had a good season and is looking forward to the third season in May. The museum is located on the second floor of the old schoolhouse in High Falls. It is open one Friday, Saturday and Sunday, May through September. ACS members are invited to visit the museum in the coming season. The society will appreciate gifts or loans of D.H. artifacts for display in the museum.

The Preservation Committee made a presentation before the Ulster County Landmarks Commission, with the hope that eventually the entire canal and canal-related buildings, plant, and structures will be designated as a historic site. At the annual banquet held at Lake Mohonk, Minnewaska State Park, a panel of canal boats to Tonawanda came into being.

Memberships in the society are: Single, $5; Family, $7.50; Life, $350. Further information from D.H. Canal Historical Society C/O Ms Grace Elliott, 300 N. Ohioville Road, New Palts, NY 12561.

Visit to "Big Chute" Marine Railway on Canada's Trent Canal

By Denver L. Walton

The sign said, "Dancer-Cross at Your Own Risk," and the rocky wooded bridge ahead would surely have been considered all but the most sincere canal buff. We had traveled about 30 miles north of our campground at Bass Lake, near Grilla, Ont., with scant information about our goal, and it was raining so hard we couldn't see across the bridge before us.

We crossed the bridge and were immediately confronted by a second, this one spanning an inlet channel for a small hydroelectric plant, and then the first for flimsy construction. If you can imagine a Pontiac station wagon tip-toeing across a bridge, that's how we felt!

Amidst the rain and all the waterworks around, we would have been much more con- SCIF, Inc., Box 636, Goshen, New York 10924,

fident in a packet boat; we crossed a set of rails, then our road ended abruptly in a parking lot. Ha! Was this the Marine Railway? As we got out of the car, we were welcomed with an immediate drenching, but even our five year old son had caught our enthusiasm in finding the railway, our only thought was to keep the clothes dry. Looking around, we could see that we had crossed the track about midway on the upper section of the canal system, between the river's edge and the control towers. Before beginning our inspection, we learned that the railway was not open for whatever information we could find, and we found none. There was nothing in print, and the operator left the gate open to the inquisitive.

We returned to the riverbank to watch the "looking" operation, only slightly discouraged by the continued heavy rain. A large railroad car with a boxcar on top and ends removed, was half-submerged in the wind-tossed water of the Seneca River. The supposition was that the car, a fifteen foot outboard drifted into the open end of the carriage, and the three crewmen, in yellow rain slickers, were securing it to the open frondage on the side, while the keel rested on the pitted blocks. A heavy cable between the rails drew the carriage back to the top of the river, and slowly fell in place around the other. The car stopped with a jerk, then the crewmen started to desฐbate the lowering. The car was lowered rather slowly, faster than we could walk down a wooden board from 70 or 80 feet below. Here, the process was reversed, and the boat, freed from its mooring, drifted backward out of the submerged carriage to the waiting river.

At the lower docks, three more pleasure boats awaited, one of them a big cabin cruiser. The weather was so inclement that we watched the full procedure several times in a half hour or so (we never got any farther than the first two minutes.) It seemed to take a long time to load a heavy craft to the car, but the actual passage was accomplished in less than five minutes. We learned later that the Big Chuteicular system can handle boats up to 50 feet in length and weighing as much as 20 long tons (40,000 pounds or 180,000 pounds, or lift) is 50 feet, and the lower edge of the track drops at a steep 30 degree.

Big Chute is one of two marine rail- ways in the Trent River, both of which were completed in 1919, replacing abandoned lift locks. The Swift Rapids marine railway was in operation by Pennsylvania's Portage Railroad in 1834.

The Trent Canal has a fascinating his- tory, developed by the Crown to connect the British colonies in the Maritimes and the Can- dian province of Ontario. In 1819 it was completed as a canal, and the actual completion of the work was in 1849.

The first actual construction was a tem- porary wooden lock at Bobcaygen, complete by 1832. On July 12, 1890, the new lock was opened to receive the message, "Irene" of Ireland. This vessel had left Trent Lock July 11, and went on to Port Severn. The lock, built by contractors in 1890, was opened to be used by the first vessel to travel the entire 235 miles of the Trent Canal.

The modern freight route is intended to be, the Trent is operated for pleasure craft. Boaters pay no lock- ing fees. All expenses are borne by the Dominion. In return, the region attracts a tremendous number of tourists.
Middlesex Canal Association

At an election of officers of the association held in September 1972, Douglas F. Adams of Charlestown, Mass was elected President and William H. Axle (Director of the American Canal Society) of Plainview, New Hampshire was elected Vice President.

In Towpath Topics (Bulletin of the NSA—December 1972), President Adams talked about the "pale of change" hanging more deeply over the southern portion of the Middlesex Canal than the northern. He called for greater efforts to maintain the canal, as the southern portion had been neglected for many years.

However, the canal has seen a resurgence in interest and activity, with efforts underway to restore and preserve the canal's historical significance.

Musk rats Threaten Dutch Dikes

The muskrats are coming and the Dutch are scared. In that country the only good muskrat is a dead one. The muskrats have been converting from the Belgian border on the south and the German border on the east. Neither Germany nor Belgium has much concern about these creatures, as they do not have half of their country below sea level, needing the protection of dikes which the mice soon learn to make safe homes for dike animals.

A muskrat patrol along the Belgian border is made up of several overworked patrol officers, who besides trapping the furry animals themselves, pay people five guilders per day, dike animals.

The whole thing began when muskrats were introduced from the United States, Canada, and Russia into Czechoslovakia and France in the '50s, with the hope of profit. The French had caught them in Europe, so owners simply turned the animals loose about the war, a novelty.

They have been spreading ever since, the first one was sighted in the Netherlands on the Belgian border nearly a decade ago. Muskrat patrols are busy, keeping an eye on every dike and keeping the muskrats under control.

The Dutch have a law with a very stiff penalty, for keeping muskrats as pets or even using them for laboratory tests.

(Courtesy of The Evening Star) (Provided by Don Ramsey)

C.O. Towpath Guide Series Completed

I.M. Canal Repairs

The Rock Island District of the Corps of Engineers will remove lock No 2 on the Illinois and Mississippi Canal and construct a towpath bridge at Aqueduct No 2. Work on this project will be done along the entire length of the canal from the Illinois to the Mississippi River, allowing normal water levels to be maintained throughout the canal. The repair work will be completed by the Illinois, which now owns and operates the canal for recreational purposes.

Park Bill Drafted

Legislation has been drafted for introduction in the U.S. Congress to extend the New York State Historic Park to its original terminus in Cumberland, Maryland. The boundaries of the national park are set by legislation enacted in January 1971 and cannot be changed without amending the authorizing Act. While the canal and towpath are under National Park Service ownership, all the way to the canal terminus in Cumberland, no expansion or development is authorized beyond the existing legislation beyond North Branch where the current park ends. According to the U.S. Office of Public Lands, there has been a considerable interest at the local level regarding an extension of the park and canal program to the original terminus.

Camillus Erie Canal Project

There is an extensive plan to "recovery" some 3 miles of land along the old canal in Camillus, New York, which has been abandoned and lain useless for almost 50 years.

Behind the plan is a patient group of seven persons, who comprise the Camillus Erie Canal Committee. Last year the town decided to go all out: town officials offered the state $1 for the land and the state accepted.

By denying access to the canal area, the committee has aroused the dumping of refuse, garbage, car parts and car bodies. Volunteer groups are clearing and cleaning up the canal.

A plan to raise the water level in the main canal by purchasing a feeder water supply or use of a pond on nearby property are under consideration.

(Syracuse Herald Journal 11/23/72, Submitted by Daniel McDermott)

Georges River Canal

"I live on the bank of the Georges River and am very interested in its preservation but at 86 years of age I cannot do much toward its care. I do have some perennial flowers on the bank and keep the bushes and trees trimmed away. It is too steep for using a lawn mower so grass gets tall. Men folks today do not like to use a hand scythe so I do not use my scythe."

(From Mrs Grace H Johnson, Route 103, Appleton, Maine 04002)
THE CANALS OF SOUTH CAROLINA

By Lewis V. Richardson

(The first of a two-part article)

In the last decades of the 18th century, South Carolina was beset by problems peculiar to all of the struggling new states—that of developing the economy by "Internal Improvements" and efficient means for the transportation of goods and produce. It did, however, have certain problems peculiar to its own situation. The state was nearly 350 miles long, and by 1790, there were less than 250,000 inhabitants, slave and free. Charleston, the principal city, was inhabited by less than 20,000 people and the state was inhabited by fewer than 15,000 people. And it would be 25 years before Columbia, the capital, was an important city with only 200 or so males. Neither was the state actively engaged in anything else but agriculture, a situation which was neither unusual nor ideal for the future development of the state. The lack of demand for other goods and services reduced the need for efficient transportation.

The last two decades of the 18th century, however, gave rise to the problem of the rice trade. The rice trade was a critical one for the state's economy, and the need for an efficient means of transportation was迫切. The textile and tobacco industries were also important, but the rice trade was the primary focus of the state's economic development.

As in many states, there were no roads fit for the hauling of heavy loads. People looked to the waterways as the only practical means of transport.

A glance at a map will show that over half of the area of the state is drained by one main river—the Savannah, which forms the basis of nearly 50 percent of South Carolina. Flowing south and east, it is the main route for commerce and transportation.

The Savannah River was a major barrier to the development of the state. Its width and the fact that it could not be navigated by large ships made it difficult to transport goods and people. The state was not as well connected by waterways as other states, such as Pennsylvania and Virginia, which had a well-developed network of canals and rivers.

The first step towards solving this problem was the building of the Savannah Canal, which was completed in 1794. This canal was 70 miles long and was designed to link the Savannah River with the interior of the state. It was a significant step towards improving transportation and trade in the state.

The Savannah Canal was a key component in the state's development. It allowed for the transportation of goods and people between the river and the interior of the state, and it was instrumental in the growth of the state's economy.

In the 1930-1940s, vast hydro-electric projects in the low country created lakes and new waterways, and much of the canal was obliterated. A part of the old canal and some of the massive brick structures remain on the Santee end. During the Tri-County project, much of the state's waterway system was removed to make way for the new reservoirs.

In 1827, a new canal was planned, but this was not built. The state's waterway system was still not developed to the extent that it needed to be. The state's economy was still dependent on the river trade, and the state was not ready to invest in a new canal.

The state's waterway system was not developed until the late 1800s, when the state began to invest in a network of canals and rivers. The state's waterway system was not fully developed until the 1930s, when the state began to invest in hydro-electric projects.

Wreck on the C.D.

A cargo ship rammed a railroad bridge along the Chesapeake and Delaware Canal on 2 February near St Georges, Delaware. The ship was pushed off the canal and over the bridge by a strong wind, and putting the canal and bridge out of service. The 222-foot vessel 'Yorkman,' owned by Calmar Lines of Baltimore, Maryland, wedged under the Penn Central railroad bridge, causing extensive damage. The vessel, a converted World War II troop ship, was empty at the time of the accident. It was being moved on the canal, having left Fort Newark, NJ, for Sparrows Point, MD, where it was to be loaded, and then delivered to the West Coast. The bridge has a 45 ft clearance down; when raised, its clearance is 60 ft.

Extensive damage was done to the ship's forecastle and wheelhouse. A crane of the ship was caught between the understructure of the bridge and the deck. (From The Morning Herald, Hagerstown, MD)
First Ride on the "General Harrison"

The christening and "first" ride of Ohio's newest canal boat replica was held on September 3rd, 1972. Now, with the help of a tape-recording made for the Canal Society of Ohio's library, let's go on that ride.

"We're now aboard the GENERAL HARRISON in Piqua, Ohio. Miss Shirley Patterson, the great-great-great-granddaughter of Colonel John Johnston, whose homestead was dedicated today as part of the Piqua Historical Area, has just christened the boat. The crew is now polishing our craft across the southern turn-around basin toward the twin mule-power waiting on the towpath.

"Our motive power, Jack and Katy, are now being attached to 150-foot-long towlines in the traditional tandem fashion... O.K., we're hitched up—the mules are moving up the towpath taking slack from the line. Soon we'll be under way. And, here we go!"

"Listen to that cheer go up from the crowd as the GENERAL HARRISON begins its initial voyage, wait a minute, now we're stopped. At least the mules have stopped. The canal boats' heads are to ride along... The harness has apparently slipped from the boat and has to be tightened, but it will just a matter of delay..."

"We're now lying still in the water after coasting nearly 50 yards. There was a good demonstration of how small the friction force is between the boat's hull and the water... The harness has been repaired and, once more, we're ready to go... The mule team is in position, once more, taking slack from the line. In a few seconds we'll be under way. A few minutes later, we're on our way."

"There is some jerking in our start. The mules appeared to be nervous, possibly experiencing right now and don't give the GENERAL HARRISON a second chance as the ones experienced on the MONTICELLO II and the DR. HELENA II. A few minutes of work should eliminate any skittishness the mules now have, however, and allow the boat to be smoothly and quietly at the stern..."

"Would be a good time to describe our craft. It is painted more colorfully than Ohio's other two replicas. The GENERAL HARRISON is blue, yellow, red, and brown striped, while the canals are painted yellow with blue trim. Its design is a composite of several standard types. Basically, its lines are quite similar to those of the familiar three-cabin freighter, but the GENERAL HARRISON has a full roof and the bow and stern decks are extendable from inside the boat via permanent wooden steps."

"Noticeable by their absence are the complete lack of seats. There are nearly 150 passengers aboard this inaugural trip and we're all standing! I don't know if this arrangement will persist in the future but a lack of seats might bother some of the older potential travelers."

"We've just passed the regular loading area, about half way along this one-mile stretch of restored canal. Here, paying passengers will be taken on either the southern or northern turn-around loop of the route. This ride will be about half as long as the ones given by the other two boats, but the price of the trip is about half much."

"We've now completed our northern turn-around and are headed back down the canal. It is a beautiful stone lock, Lock No. 8—our last. It has a large, clearly visible white stone during the turn-around. The boat is now passing through a most picturesque portion of the canal. The towpath is smooth and well maintained. Both banks are tree-lined and back from the canal a bit stand some gigantic trees that could very well be part of Ohio's virgin timber."

"The boat dock is now in view and our trip will soon be over. A smoother, quieter ride can't be imagined. The GENERAL HARRISON is a well constructed, colorful boat and a ride on it is well worth the trip to Piqua and the Miami & Erie Canal."

(Reprinted from CANAL COMMENTS.)

Student Project on the D&R Canal

The Delaware and Raritan Canal, Bordentown to New Brunswick, N.J. (1834-1933), most of its 12 miles still water-filled, has been studied by a group of Rutgers University students. The students propose a plan to erect a State Park, principally in connection with the Bicentennial, and also as a potential element of New Jersey's state and regional transportation system. The photo above was made during a recent tour of the Pennsylvania Canal Society. It shows the overlook look on the D & R at New Brunswick. Interested parties are invited to write Cooper F. Bright, Director, Center for Transportation Studies, Eagleton Institute, Rutgers University, New Brunswick, N.J. (SIA Newsletter, Jan. 1973.)

Canal Society of N.J. English Canal Tour

Here is the latest on the CSNJ trip to England this summer. 'In case there should be any doubt, we are definitely going to England...sixteen members have made part payments toward the trip. We leave Sunday evening, June 20th and return July 14th.'

'Ve will include an orientation tour of London, a boat ride on the Thames to Hampton Court Palace and perhaps a ride on the Regents Canal; a visit to the Waterways Museum at Stoke Bruerne on the Grand Union Canal, at Great Haywood Junction the group will board their Anglo-Welsh Narrow Boats which will be home for a week.'

'The boat tour will start out on the Staffordshire-Worcestershire Canal.'

Old D&R Photos Needed

William J. McGilly, Jr., 98 Valdo Ave, Bloomfield, N.J. 07003 and Cliff Crawford, 8 Piedmont Drive, Cranbury, N.J. 08512 are working with the Canal Society of New Jersey on a history of the D&R Canal. They are seeking old photos of the canal's history. Please write to them at the above addresses if you have any old photos. They hope to create a complete and sequential record of the D&R Canal as it was during its years of operation. Please contact one of them if you have or know of materials which would aid their project.
Opening of the Erie Barge Canal — 1915

This is a MICHON photo-card showing ceremonies May 15, 1915 in connection with the official opening of "The Waterford Flight" of five huge locks, which elevate lake-size vessels 130 feet from the Hudson to the Mohawk River, on the Erie Division of the New York State Barge Canal.

From Dr. Paul E. Grattan, ACS member in Waterford, N. Y., comes word of a fabulous collection of photo-post cards of days gone by in that area, with many scenes along the Erie Barge Canal in its opening days, circa 1915. Two of these cards are reproduced here. They are at "MICHON's" news room and novelty store in Waterford. Some 280 old negatives, of cards out of print for many years, have recently been discovered and reprinted. They sell for 15¢ each. Dr. Grattan advices all canal buffs in the area to make a "beeline" for Waterford and look them over.

Piqua Pamphlet

The pamphlet enclosed with this issue of the ACS Bulletin was arranged by ACS Member James R. Palsey of Wheeling, West Virginia, Jim is a rather "dualistic" information to the American Canal Society.

Canal Index Form

The canal index form which accompanies this bulletin represents the beginning of an attempt to establish a fairly comprehensive and current index for all canals in North America. Hopefully, in the course of time, it will serve, in printed form, as a basis for further research (archaeological or otherwise), for restoration/preservation activities, or simply as a form of brief guidance for an enthusiast on a day's outing.

The index committee does not expect the information included to be comprehensive; indeed, a supplementary "structure index" has been proposed and may take some of the strain off the canal form itself.

A neat form can be filled in, the wording on the index form is largely a reminder of what to look for. It will be the task of the index committee to amend and collate all entries; we welcome therefore all endeavors, however seemingly insignificant.

A few notes as to the terms employed:

"Status" refers to the present condition of the canal; whether in use, in good condition, abandoned, under the surface, needling immediate attention, etc. "Location": It will be helpful if the particular land features be noted in addition to the towns at either ends of the canal. "Type of Navigation" refers to whether navigation was by steamboat, towpath (no locks) or both. Maps are also important; if a particular set has been helpful, it might be useful to note that among "unpublished records...

Noble E Whitfords History of the Canal System of the State of New York, 2 vols, 1906 will be found to be a valuable source if a copy can be obtained.

Similar forms have also been developed for canals which were surveyed only and also for those on which construction was begun but which never actually saw use. For these forms and any further information write to the canal index committee at the address at the bottom of the form.

C&D Pumphouse

Chesapeake City, MD, housing two large 175-HP (36" x 84") beam engines by Merrick & Sons (Philadelphia); one of 1852, the other 1854, the earliest American steam engines in situ. These drove a 40-foot diameter x 10-foot wide scoop or lift wheel that raised water 14 feet to make up that in leackage, when the canal, which connects the head of Chesapeake Bay and the Delaware River, was widened and deepened in 1926-27, the locks at each end were removed, but the pumping station, then obsolete, was preserved by the Army Corps of Engineers, custodian of the canal. House engines and wheel are intact, a recent superb museum of the canal's and the pumphouse's history now occupying the boiler house. Generally open daylight hours, 7 days; 10 miles S, Exit 9, Kennedy Expressway through Elkton, MD. An additional "bonus" for the visitor is a small folder issued by the Corps of Engineers, giving a history of the Pumphouse, vital statistics, and a C & D Canal map.

Correspondence with the Aurora Historical Commission of Aurora, Colorado (PO Box 627—ZIP 80011) led us to a new revelation, when they stated, "after reviewing your material on the canals I think we are probably not interested in the SARH kind of canals, but we are interested in the ones we built with members in your organization. Ask and you'll get - our canal is of the irrigation type! Please do not look down upon us, as we are preserving it. Our canal is a thing of beauty!" The Highline Canal, which runs through Aurora, is now undergoing a five-year beautification plan, including bicycle trails and bridle paths. It has recently been made part of National Trails System.

We have assured the Aurora Historical Commission that those members of the American Canal Society and that the only reason we have not covered irrigation canals is that we don't have a subject. Let us know if you have an interest in this aspect of our American history.

Highline Canal

Whitewater Canal

With reference to the map on the Whitewater Canal on page 9 of the Nov 1972 issue of American Canals, Lew Richardson comments, 'Although the article is about the Whitewater, the map with it shows not only that waterway, but also the Cincinnati and Whitewater Canal, an entirely different name and a completely different canal system to the American Canal Society and that the only reason we have not covered irrigation canals is that we don't have a subject. Let us know if you have an interest in this aspect of our American history.'