NEW YORK MARITIME EXHIBIT

Mia New York, Von abollo Poocke, poses with ACS Director, Bill McKevelcy at the New York Harbor Festival Exhibition grand opening at the World Trade Center. The special Maritime Exhibition was sponsored by the American Bureau of Shipping as a prelude to the 1976 Harbor Festival. The key event of the Festival was the great parade of ships which took place on Saturday, June 30th, when fifty vessels representing every aspect of the shipping world sailed from the George Washington Bridge to the Verrazano Narrows Bridge. The armada included a selection of liners, cargo ships, windjammers, harbor craft and military vessels. Topping the list were seven of the world's great cruise ships, led by the 180' coastal liner INDEPENDENCE and concluded by P & O's 820' S.S. CANBERRA, the world's second largest passenger liner. The INDEPENDENCE of Hadley, C.T., operated by American Cruise Lines, Inc. regularly transits the Cape Cod Canal, Cape May Canal, Chesapeake and Delaware Canal, Annapolis and Chesterapeake, and the entire Intracoastal waterway to and including St. Lucie and California Canals.

NEW SHOREHAM II

A new luxury cruise ship, NEW SHOREHAM II, is under construction at Blohm & Voss, Hamburg, F.R. It is being built for American Cruise Line, will be 150-feet long, carry a working crew of 12, and have 25 deluxe cabins on three decks. She replaces NEW SHOREHAM, which has been sold. According to Bervo, she will be the first vessel in the world to recycle waste water. When she begins service this fall in Canada and the Bahamas, she will be the only cruise ship under the American flag operating in the Caribbean. NEW SHOREHAM II will be able to navigate waters such as the Erie Canal by lowering its topmast superstructure, and with a six-foot maximum draft she will be able to call at every city on the Atlantic and Gulf coast. Bill Eerton, contributor.

Workers Accidentally Pull Plug, Drain Canal in England

LONDON (UPI), August 17, 1978 - Workers accidentally pulled the plug and a mile and a half of the Chesterfield Canal went down the drain. A high-rise team was busy removing old brick, car parts and other odds and ends from the 10-foot-deep canal when they came across a length of chain that wouldn't budge. The crew attached it to their dredger and yanked. Then they took a break for tea. When they came back, the water was gone. "I've never seen anything like it," said waterways foreman John Rutwell. The wooden block (on the end of the chain) was a plug and it pulled it out. The canal water drained away into the nearby Idle River.

PRESIDENT'S MESSAGE

Thanks to some excellent planning on the part of our Canadian Director, Lou Canning, his able assistant, Colin Dewar, and in fact the entire Committee in St. Catharines our tour of the four Western Canals in September was an event we will long remember. In spite of heavy rains in the area the day before our Tour Day dawned to an almost cloudless sky ideal for photography. With heavy attendance at the historical society of St. Catharines, as well as members of the local welcoming committee, we had approximately 120 people attending, the various events of the three-day stay and it was the most enjoyable, and certainly the most successful affair that the American Canal Society has ever had.

Ruth and I returned a few weeks ago from a brief but full tour of France and Switzerland. Making our surprise while riding a French train between Paris and Lyon, to spot a canal running for miles along our route (parallel to the River Arno and Yonne), I was able to get a few photos of the canal locks and channels as the train sped along, and our appetite is whetted to go back tour the French canals more carefully.

Our list of ACS LIFE MEMBERS continues to grow - a few names added to the list recently includes Dr. Dr. Trout (ACS vice- President) of Durate, California; William G. Turnbough of Fayetteville, New York; William A. McKevelcy Jr. (ACS Director) of Bloomfield, New Jersey; Ralph S. Miserhi of St. Catharines, Ontario; and Charles Derr (ACS Secretary) of Freeburg, Pennsylvania. We hope others will take advantage of this "one-time" dues payment of $100+ assuming them a permanent place on our mailing list and the avoidance of future dues increases.

New River Buffs Association

An organization of interest to our members in West Virginia and Pennsylvania has recently formed the New River Buffs Association. It publishes a well-illustrated 11" x 14" tabloid newsletter called the "VOICE OF THE MON", which includes much interest to canal buffs, concerning the history of the old Monongahela Navigation Company, prior to its takeover by the Army Corps of Engineers. Membership in the organization, including subscription to "Voice of the Mon", is $5 payable to the New River Buffs Association, c/o General Motors, P.O. Box 305, Greensboro, Pa. 15338, (William P. Young is Chairman.)
Sanitary and Ship Canal Lock

The lower end of the lock connecting the Illinois and Michigan Canal and the Sanitary and Ship Canal. Note wooden miter gate at the lower end of the lock.

KNOW YOUR ACS OFFICERS

The subject of our column this issue is our ACS Vice President, Dr. William E. Trout, III. Over his career, Bill has served as a professor of Biology at the University of Illinois, an administrator at the University of Wisconsin, and as a fiscally responsible manager at the University of California. His research interests include the evolution of social behavior in animals and the use of gentrification as a tool for reducing poverty in urban areas. In his spare time, he enjoys playing the piano and reading the latest literature in the field of comparative psychology.

ILLINOIS & MICHIGAN GRANT

The Department of the Interior has granted $113,035 to the Illinois Department of Conservation to be used for the restoration of Lock #14 of the Illinois-Michigan Canal at LaSalle, Illinois. State funds will match the federal grant. Designed in the 1800s, it was one of 15 numbered locks on the main line of the canal. Plans for the Lock #14 project, scheduled for completion in two years, include the accurate reconstruction of the lock's four wooden gates, plus restoration of the stone masonry walls and oak flooring. The work will require the recovery and use of 19th century building techniques.

Much of the work on the lock will be based on research conducted by the Illinois Department of Conservation, which has a long history of studying the history and culture of Illinois waterways. The department has conducted archaeological surveys and excavations along the canal, and has published numerous reports and articles on the history of the Illinois-Michigan Canal and its impact on the local communities.

The lower end of the lock connecting the Illinois and Michigan Canal and the Sanitary and Ship Canal. Note wooden miter gate at the lower end of the lock.
THE PAW PAW TUNNEL

By Thomas F. Hahn

The Paw Paw Tunnel is the major feature of the Chesapeake and Ohio Canal, built as a bypass to some very difficult terrain along the Potomac River in the Paw Paw Bends. Here the river makes a series of gantian fronts; the tunnel route cutting across a large double bend extends one mile where the river travels 5.4 miles. While the tunnel route involved cutting thru 3-11 feet of solid rock the Maryland shore along the river route contains some impressive cliffs coming right down to the river. To have followed the river with the canal would have required either a crossing to the West Virginia shore and back and hooking the canal along those cliffs; damming the river at the lower end of the bend to form a slackwater and cutting a towpath along the cliffs; or putting the towpath on the West Virginia side of the river.

The alternatives were thoroughly debated within the canal company and, due largely to the enthusiastic advocacy of their newly-appointed engineer, Charles R. Fisk, the latter plan was. Even when work was well advanced the board of directors seriously contemplated the abandonment of the partially completed tunnel in favor of a dam. A decision was made to proceed with the tunnel in February 1838, with the completion date set for July 1838. In actual fact, the tunnel was not completed until 1850, though it was hailed thru' in 1830. Two other men responsible for building of the tunnel were Fisk's assistant, Edward Hill, and the general contractor, Lieut. Montgomery.

Montgomery, a Methodist minister with previous tunnel-building experience, built a 790-foot tunnel on the Union Canal near LeBaron, Pennsylvania, contracted to build the tunnel in the spring of 1838. He appears to have been a rough, tough customer but energetic and not unimaginative. Bricks were scarce in the area, so he brought in a patented brickmaking machine from Baltimore and set up his own brickworks, un-successfully though it turned out. Much of the tunneling work involved cutting through rock and the construction of sophisticated brickwork and masonry. The Irish laborers who built much of the canal were not particularly skilled in some of the things to be done, so Montgomery brought in English masons and English and Welsh miners and local Pennsylvania and Maryland "Dutch" masons and laborers. Those miners, rational as they seemed, were later to contribute to his downfall. Montgomery accepted the contract at much too low a cost. On all sides the optimism was great as to the ease and speed with which the job could be done. The rock formation through which the tunnel was to be dug was a natural arch of shale, thought to protect against cave-ins, the same formations easily split and drastically allowed the work. It was estimated early that "a single hand can bore from seven to eight foot per day,..." whereas in actual fact the rate of progress for an entire crew at each tunnel face was 10-12 feet per week. The tunnel was a large undertaking, employing up to 44 men at a time.

Morris played a significant part as the principal financier between the canal company and the contractor. Montgomery was not around at the finish. Against all sorts of odds, some of his own making, Montgomery succeeded in driving the tunnel through, through not in finishing the entire job. Cromery, overruling his credit, he was finally caught in one of the periodic financial crises of the canal company and went under. The tunnel he had built was acclaimed "A Wonder of the World," while he was tossed aside, a sacrifice to creditors to whom he had indebted himself trying to fulfill his contract.

During 1838 there were riots among Irish laborers working on other portions of the canal, but Montgomery managed to keep his workforce going without interruption. In early 1839, however, unrest among his own men over the pay situation and grievances among the various national groups finally exploded into violence. The Irish terrorized work camps and drove off British workers for a time. More riots occurred in 1839, Irish versus English and "Dutch." The tavern at Oldtown was destroyed and workmen's shanties were burned. A general strike occurred in May, 1838, along the entire line of the canal, based on failure of contractors to meet payrolls. Local militia, who by this time strongly sympathized with the workers, turned out reluctantly to restore order. Montgomery fired and blacklisted 130 men and work was resumed. More rioting broke out in 1839, this time at Little Ossscott and once again the militia was called in.

The work, despite failing finances and violent unrest, continued through 1840 and 1841, but in 1842 the canal company collapsed and work on the entire canal ceased. The tunnel was completed and operating up to Dam Number Six, about 20 miles below the tunnel. In addition, much of the stretch above the tunnel to Cumberland had been finished. Montgomery, who now disappeared in a maze of lawsuits, his personal fortune sunk in the abortive attempt to finish the tunnel, had actually driven it through, but a great deal of work remained. At the tunnel the deep cut, plagued by a slide, was not fully cleared, and the canal in the cut also had to be completed. The tunnel itself was not yet completed and still had to have brick lining installed. Morris found that Montgomery and his patented machine made poor books. Fortunately, Morris found sufficient money to resume work under a new contractor in 1847. The tunnel and canal were finished and opened to traffic in October 1846.

The construction was an impressive feat. It involved not only 3,118 feet of tunnel, but also 500 feet of deep cut at the southern end and 800 feet at the northern. In order to speed up the work, two sets of vertical shafts (one at 122 feet and one at 100 feet) were dug down from the hill overhead (two shafts per set to provide ventilation) until the tunnel level was reached, and then digging was carried out in each direction.

(Continued on Page Seven)

An interesting "posed" photo of the Excursion Boat OAK SPRING entering the north portal of the Paw Paw Tunnel. Passengers must have been more agile in those days, as evidenced by the crowd atop the masonry sill.
CANAL DEVELOPMENT IN EARLY AMERICA (Part 2)

By Richard G. Waugh, Jr.

Despite the interest and encouragement of such prominent American figures as George Washington and Ben Franklin, the federal government made little investment in the early canals. From 1788 to 1851, there were no government canals.

The earliest expression of interest in canals by the United States Congress was the Act of 16 March, 1834, whereby the Congress appropriated $25,000 for improvements to the Monongahela Canal. By the general survey act of 30 April 1824, the Congress appropriated funds for surveys on roads and canals. Under this authority, the Corps of Engineers of the United States Army conducted most of the major waterway surveys in this country. The next year, the Congress took its most direct interest in canals by subscribing to the stock of the Chesapeake and Delaware Canal Company. Between 1825 and 1831, the Congress bought stock in this company and three others - the Louisville and Portland Canal on the Ohio River, the Dismal Swamp Canal in Virginia, and the Chesapeake and Ohio Canal in the District of Columbia and Maryland - at a cost of $1,285,000.

Apparently, the Congress was satisfied that canal construction was proceeding well enough without intervention from the federal government. To encourage construction by states, the Congress granted land to them specifically for canal construction. Between 1827 and 1848, Indiana, Ohio, Illinois, and Wisconsin received a total of 2,367,000 acres to build the Wabash and Erie, Miami and Ohio, and Illinois and Michigan canals. Later, the Congress granted an additional 1,450,000 acres to Wisconsin and Michigan, mainly for ship canals on the Great Lakes.

From 1809 to 1838, the Congress provided direct appropriations of $2,252,000 for specific canal improvements, but then no more until 1845, when it appropriated only $5,000. No further appropriations were made for canals until 1894.

Even later than the period under consideration, federal ownership of canals was minimal. In 1906, there were still 2,198 miles of canals in operation, of which only 104 miles were federally-owned, 1,359 miles were State-owned, and 636 miles were privately-owned.

MAJOR ENGINEERING FEATS TO 1851

In order to compare the worth of the several canals built up to 1851, it is useful to categorize them by distinctive engineering features that display the difficulty of construction. In the following sections, major parameters are discussed.

Longest Canals.

The longest of the early waterways was the great Erie Canal, completed in 1825 over a distance of 363 miles from Albany to Buffalo, New York. Much later, in 1851, the Wabash and Erie Canal became the country's longest mainline canal, covering 379 miles in Indiana from Evansville on the Ohio River to the Ohio State line, and then 16.5 miles in Ohio to the junction with the Miami and Erie Canal near Delaware, Ohio. With the Miami and Erie connection, the route provided a connection from the Ohio River to Lake Erie at Toledo, 486 miles long.

Canal Steepness.

Some canals were relatively short but extremely steep in ascent and descent, thereby requiring a great number of locks. An example is the record for steepness - the Crooked Lake Branch Canal of the New York State system. Crooked Lake Canal was only 8 miles long, but required 27 locks to overcome a lift of 270 feet.

Two canals - the Crooked Lake and Black River in New York - required more than three locks per mile. One other canal required more than two locks per mile - the Chemung. It is interesting to note that all three were part of the New York State system.

Canal lift.

More important than the mere difference in elevation between canal terminal points is the total rise and fall to be overcome along the canal route. For this reason, the Pennsylvania Main Line Canal from the Susquehanna River west to Pittsburgh represents by far the most difficult job, with a total rise and fall of 3,712 feet. The task was accomplished in canal sections covering 277 miles by 177 locks and a portage railway of 39.7 miles. The next major canal in lift is the Morris Canal which included 23 inclined planes and 23 locks over a distance of 102 miles and a total rise and fall of 1,654 feet.

(Continued on Page Five)

Typical masonry aqueduct on the lower section of the Chesapeake and Ohio Canal, sixth longest canal in the USA. (Photo by Tom Hahn)
Lock Lifts.
To 1851, most canals had locks ten feet deep. This seemed to be the practical planning limit for most canals. Exceptions were the aqueduct locks. The Lehigh Navigation Extension, 32.3 feet deep; the Alexandria and Georgetown Canal, 16.5 feet deep; and the Dispersal Swamp Canal, 12.1 feet deep per lock.

The most notable achievement in lock construction of the period occurred on the Erie Canal. Near the western terminus of the canal at Lockport, New York, the original canal had to overcome a rise of 330 feet. Nathan S. Roberts devised an artful solution to this problem with tandem locks — those set end to end. He built ten locks in two sets of 12 feet each having two locks side by side. Each lock was 98 feet long and 15 feet wide. These locks, called "Lockport Fives", brought canal traffic from around the world to gazing at this great engineering feat.

Lock Sizes.
Inadequate lock dimensions plagued many of the early canals, particularly those that were planned to connect with other canals. Such was the case with the Union Canal’s Dispersal Division, where the locks were built 75 feet long and 18 feet wide. The Denver and Colorado, which afford the western connection for the Union Canal, however, the Main Line was to have locks 80 feet long and 15 to 17 feet wide. The Union Canal eventually did increase its locks to 90 feet by 17 feet, but the financial strain of expansion almost broke the company.

The largest early locks were the three lower locks on the Patowmac Canal, completed in 1818, which were 105 feet long and 13 feet wide. The Delaware and Raritan Canal, completed in 1829, was also of this size. The original Erie Canal locks were 90 feet long and 15 feet wide from 1817 to 1829. Then, the Pennsylvania Main Line Canal locks were built 175 feet wide and in some places, twice as long, 180 feet, between 1832 and 1834. Taking row of this success, the Erie Canal increased its locks to 110 feet by 18 feet between 1839 and 1852. The largest locks of the period were the 12 locks on the Muskingum Canal, 180 feet long and 15 feet wide with three locks at the Louisville and Portland Canal, 189 feet long and 50 feet wide.

Lock Construction.
Several early canals of about 1795 had locks measured 10 feet deep. Inclined planes were substituted for locks on the South Hadley Falls, on the Connecticut River in Massachusetts, and on the Morris Canal in New York.

Inclined Planes.
Inclined planes were substituted for locks on the South Hadley Falls, on the Connecticut River in Massachusetts, and on the Morris Canal in New York.

This old print of the Monteugil Inclined Plane on the famous "Switch-Back" Railroad, serving the Lehigh Canal at Mauch Chunk, typifies the many inclined planes in use on the primitive railroads in Pennsylvania before the advent of the steam locomotive.

South Hadley Falls.
In 1793, the first inclined plane was built to permit barges to pass the 60-foot high falls at South Hadley. The plane itself was of rock faced with heavy planks. Barges entered a watertight casing having folding gates at each end and supported by three sets of wheels of graduated size so that the casing would remain level. The canal was then raised up the slope by the power of two water wheels. The plane was later replaced by locks.

Morris Canal.
The Morris Canal had 25 locks and an equal number of inclined planes over its length of 101 miles. Completed in 1851, the planes covered a total rise and fall of 1,334 feet, averaging 53 feet lift each, with the highest being 100 feet. At the end of each plane was a lock connecting with the respective pool. Canal boats were carried over by water-power driven ropes and cables and lowered (or raised) into the adjacent pool where they were floated from the carriage. The carriage rested on two trucks of standard railroad cars. By 1845, the planes were modified to take larger boats, so that with the loaded boats the carriage weighed 100 tons. The track was ordinary T-rail set at 18-foot gauge and laid on longitudinal stringers, placed on a foundation wall of masonry. Also, as the canal boats grew in size, some were adapted so that they could be split in two for rail carriage, and then joined together again for the waterway. An Engineer officer reported in 1844, that observations made on the operating of a plane at Newark, N.J., 10 feet, and having a lift of 70 feet showed that boats were readily and efficiently passed from one plane to the other, over a horizontal distance of about 1,000 feet in four minutes, equal to the rate of twenty-eight miles per hour.

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The recently formed Nevernark Valley Area Museum, located along the route of the old Delaware and Hudson Canal, is now publishing the "NVAM Newsletter": Information about the Museum, which was recently awarded a federal grant, may be obtained by writing the Director, Charles Thomas, Box 363, Cutlerville, N.Y. 12779. One of its prime purposes is to inform the public of the historic impact which the D. & H. Canal had upon the area.

Earl Minderman, of Bethedea, Maryland, has been invited to exhibit his canal paintings at the Great Falls Museum, Rockville, Md., by the National Park Service. His extensive works will be on display (a one-man show) during December. John Hendrie, of Baltimore, known as "Vistas and Visions - Today and Yesterday on the C. & O. Canal."
PAW-PAW TUNNEL
(Continued from Page Three)

The digging of the tunnel was done by blowing big pieces of rock with black powder and then reducing them with hammers and picks. Spoil was hauled up the shafts by winches and carted to spoil heaps in the ravines by (probably horse-drawn) rail cars, or else hauled out of the portals by rail to spoil heaps, mostly on the upper side of the canal. Those heaps are still visible, particularly above the towpath, downstream of the tunnel.

There are many tales and legends about the tunnel. One involves an Irishman who operated a sort of an elevator at one of the vertical shafts on the tunnel, which was being dug, bringing loads of rock to the surface and lowering men and supplies, and his mule. The Irishman and his mule shared one characteristic – a very short temper. They quarreled more and more as the work went on, until one day the mule kicked the Irishman where it hurt. Increased, the Irishman kicked back, only unfortunately, the mule was standing at the edge of the shaft. Down he went, to land angry, but unhurt at the bottom (this is the hard part to swallow as the shafts were 400 feet deep). Only now there was no way to get him to the top again, so the Irishman, in addition to his other duties, had to carry relief belts of hay and buckets of water down the shaft to the mule until the workers could link up the tunnel coming in from a portal to get him out.

New Lock at Port Charlotte, Florida

![The new navigation lock at Port Charlotte, Florida, completed in 1978. is approximately 30 feet long and 15 feet wide. (Gould photo)](image)

by Alden Gould

A lock was completed in 1978 for the General Development Corp. Its purpose is to maintain a more or less constant water level in several canals that are adjacent to this area. It appears that the water at Port Charlotte Harbor has previously been kept at a much lower level by the operation of the locks, causing damage to some areas by the effect of the waves. Because of this, the new lock was constructed to maintain a higher water level, thus preventing the damage that had occurred in the past.

Masone at work on the interior of the tunnel as part of a National Park Service project in the 1960's. (National Parks Service Photo)

At the tunnel entrance the tunnel lining is dressed stone and from then on to 20 feet below the south portal the tunnel is brick course thick except for the vertical shafts where it is six courses thick. The tunnel has a 12-foot radius on 11-foot vertical walls. The towpath runs on a ledge about four feet wide and equipped with a stout railing a little better than waist high. The top rail is a square post, in many places showing deep cuts burned into it by low ropes of mule drawn boats. There are wooden rails or bushes on both inner sides of the tunnel to keep boats from scraping the brick walls. The height of the tunnel is 24½ feet, and the entrance is 17½ feet above the water. Approximately 90,000 cubic yards of rock was taken out of the tunnel. The greatest depth is 40 feet, and the tunnel is seven feet thick.

"Wep Holes" were occasionally placed at the spring line of the arch to prevent seepage of water from building up and coming directly through the brick, an admirable precaution, but one sees that it does not soon entirely effective as a great many patches are visible in the lining. The Port Service did a thorough renovation of the interior of the tunnel in 1968, in 1978 it remains in excellent condition. The two sets of vertical slabs from the surface of the hill overhead are fairly easy to locate by the extensive seepage of water coming through the brick lining from them.

The upstream portal of the Paw Paw Tunnel has stone steps on each side, by which one can climb to the top. Some of the exposed strata (mostly shale), at the top and running down the body of the hill, contain fossil shells. The engraved inscription is "C. B. Flack, Engineer," with a date "March 10, 1880" and the words "Thought of in the future, the tunnel will probably have never been built." He was the canal company engineer who pushed through the tunnel project from the beginning, and who was Chief Engineer when it was finished in 1880.

Alley's Union engine was the first boat to pass through the tunnel. A party of eight men was sent ahead to post a lantern at the other end, and so that an incoming boat would know that the tunnel was already occupied and would wait. This didn't always work, however, and at times it was necessary to stop the boat and wait for the outgoing boat to clear the tunnel. On one memorable occasion, neither side would back down for days. The boats on the fields, boats laid and company accountants tore out their hair. Legend has it that finally the section superintendent would stand on no longer, went out to yard farms and bought all the good corn he could find and then at the upper end of the tunnel he built a roaring fire and threw on green cornstalks. With remarkable speed the dispute was settled and the tunnel cleared.

(Tom Hahn, a professional industrial archeologist, is the Editor of American Canals and President Emeritus of the American Canal Society.)

This could create low water for navigation, also possible near the top. However, should in this condition occur, such as a tropical storm, then the volume of water involved from high waves and high winds from coastal waters would drive excessive flood waters well inland through these various canals and create damaging floods to property. Once a storm is over and the waters have receded, the canals receive their greatest damage due to the increase of the water. Therefore, with the construction of this type of a lock the outflow of water can be regulated by the control tower to drain the canals, but remain plenty of water for navigation.

This lock with a small dam appears to have a high water mark of about 2 feet, but may not be normal for the area, although I have not seen a visible mark for Port Charlotte Harbor. This lock has two gates. Both sets of gates do not open back into the chamber wall as we normally see them, but outwards at the ends of the chamber. Indeed rather unusual! Lock is of concrete construction. Both gates when closed do not form a VEF, but extend straight across the ends of the chamber walls. Gates are geared driven by motors and are completely controlled electrically from a control panel having a series of push buttons. Also internally controlled are the traffic lights, whether at a given time or if an opening is to proceed from either direction. Directions are posted for individual operation, or, this may be handled by the Lockmaster from the control tower if he is on duty. However, this is an ideal locking system and very well suited for the area involved. The chamber appears to be approximately 30 ft long, approximately 15 plus wide. Chamber walls appear to be about 5½ ft above water level in chamber.

This lock and the canals in the area are used by small craft which operate on these navigable waterways, in turn pass through residential areas where estates are palatial and have their private piers along these several canals and waterways. In general, the canals are quite wide except when passing under highway bridges. Some of these navigable canals are several miles long and form a link to connect with Port Charlotte Harbor.

Access to this area from Port Myers, Florida as follows: Take U.S. #41 north to Punta Gorda, cross the Peace River thence, then follow into Port Charlotte (watch for midway Buoy) on left, make this left turn and follow several miles until you come to O'Hara St. turn sharp left where you will then see the control tower and parking.
CANAL BUFFS TOUR WELLAND CANALS

by Joy Aschenbach
National Geographic News Service

ST. CATHARINES, Ontario (Sept. 14-15, 1970) - Richard Cavagnaro grew up near one. Keith Koen brought a house on an abandoned one. William Shanik heard a speech about one. Thomas Hahn took a walk along one. Others stumbled upon them through their love for steamboats and trains.

Where some people see "a ditch," these people see old canals - a forgotten era of transportation to be unearthed, studied, saved, restored, and enjoyed.

Too many canals, they say, have been ignored by debris, overgrown with weeds, neglected, polluted, plowed under, and built over into highways and parking lots. Before the railroads, there were more than 4,000 miles of canals in the United States. Today, they point out, there are only about 2,000 miles, many abandoned.

Canal lovers have formed or joined various canal societies, spending weekends, vacations, and spare time hunting for the bits and pieces of what's left.

"I've been wandering around old canals off and on since I was old enough to drive," recalled 58-year-old Cavagnaro, a member of three canal groups, who lives in Lockport, N.Y., on the Erie Canal and has traveled from Massachusetts to Virginia looking for old locks and channels.

On the Sept. 14-15 weekend over 100 American Canal Society and Detroit Marine Historical Society members boarded buses in St. Catharines for a field trip through Canada's 150-year-old Welland Canal, the only navigable link between Lakes Ontario and Erie around Niagara Falls. They set off with cameras, notebooks, maps, pages of background material, and a geography professor from a nearby university for one of the guides.

They wore canal T-shirts, like the beige ones imprinted with a brown map of the Ohio canal, or what the oldest one at the group. The Canal Museum at Syracuse, N.Y., has been awarded a grant of $30,000 by the federal Heritage Conservation and Recreation Service to conduct an intensive underwater survey of nineteenth century Erie Canal boat remains. The search will cover not only the site of the abandoned Erie Canal but also the Finger Lakes region where canal boats once journeyed to pick up cargo.

"A Lock on the Old Canal, Thorough From "Pictourea Canada" 1882." This illustration is a copy issued by Brock University in St. Catharines, Ont., from the Proceedings of the First Annual Niagara Peninsula History Conference, 21-22 April 1979. (55, Can., Acquisitions Department, Brock University Library, St. Catharines, Ont., Canada, L2S 3A1)