



ALONG THE TOWPATH



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CHESAPEAKE & OHIO CANAL ASSOCIATION

Concerned with the conservation of the natural and historical environment of the C&O Canal and the Potomac River Basin

DOUGLAS D. FARIS

Douglas D. Faris, who was superintendent of the C&O Canal National Historical Park from 1995 until his retirement in January 2004, passed away on July 9th at his home in Fayetteville, Arkansas, at age 58. He was born in Marion, Virginia, on November 5, 1945.

Doug was a seasonal employee at Yellowstone National Park in the late 1960s. He graduated from Emory and Henry College in 1968, with a B.A. in history and psychology. He was a member of the Blue Key Honor Society, a student government officer and captain of the football team. Doug received his M.A. in geography with emphasis on resource planning and urban and regional studies and economic geography from the University of South Carolina in 1972.

In 1973 he took a position as an environmental planner for the City of Denver, Colorado, where he also taught courses in land planning at Denver Metropolitan State College. In 1974 he began his long and distinguished permanent career with the National Park Service. From 1974 until 1978 he was a planning team captain at the Denver Service Center and worked on plans for many parks, including the Fire Island National Seashore and Assateague Island National Seashore. He was a major player in developmental studies such as the Department of Interior's Open Space and Recreation Study for the Greater New York City Region. From 1978 to 1980, Doug was project planner for the Lowell National Historical Park, the first national park in the country dedicated to the industrial revolution. In 1981, he was a park planner for the Southwest Regional Office of the National Park Service in Santa Fe, New Mexico. He was later promoted to Associate Regional Director for the Southwest Region. He had management oversight for legislative coordination, park planning, land protection planning and design, American Indian Affairs, Rivers, Trails and Conservation Assistance, and long distance trail programs. It was from that position that he came to the



superintendency of the C&O Canal.

Throughout his career, Doug received numerous awards, including a Conservation Achievement Award from the Southwest Regional Office of the National Park Service (1994), the Department of the Interior Meritorious Service Award (2001), Superintendent of the Year for the National Capital Region (2003), the 2003 Shoulder to Shoulder Partnership Award, a Senate Tribute in the Congressional Record, and the Justice William O. Douglas Award for Leadership and Outstanding Achievement from the C&O Canal Association.

Heritage Hike, November 6, 2004

Directions, page 14, History, page 7

The citation for the Douglas Award read as:

To our good friend and leader, Doug Faris:

Under your leadership, Doug, these have been nine memorable years for the C&O Canal National Historical Park. Soon after you came on board you faced an unprecedented challenge. Like Noah you got to know about floods. Ninety Six began and ended with two "hundred year" floods tearing up the towpath and opening up yawning gaps in the walls of the canal prism. You didn't have to build an ark like Noah, but you hit the ground running. You marshalled your forces with great skill, determination and foresight. You put the towpath into full use with incredible speed. Not only did you swing a talented staff and maintenance team into action with focused energy, but you raised a volunteer army of four thousand volunteers and put them to work on the towpath. The flood recovery became a popular cause. The canal's naysayers were silenced. You raised several million in private money and got Congress to come up with a tidy sum for recovery projects. You looked to the future and set into motion a series of projects designed to protect the canal against the floods of the future. You gave real meaning to the buzz word "sustainability."

Your achievements on the canal have been

many but the full restoration of the Monocacy Aqueduct now in progress truly stands out. You have saved the crown jewel of the C&O Canal and it is now being restored to its original glory and with added luster! It will be in better shape than it ever was. Now it won't leak. We will have to get some water in it to test it out. As you well know the Aqueduct is close to our hearts in the Association. And we in the Association have been honored to have joined with you in partnership in the seven year long campaign which has ended in victory! Your work has become part of the C&O Canal's heritage.

Doug, you have set a gold standard in your wise leadership of the C&O Canal National Historical Park. Your devoted service, your friendship, your unfailing good cheer and courageous spirit are an unforgettable inspiration to us in the Association. Our hearts are with you and we wish you Godspeed.

Your friends in the C&O Canal Association

In Fayetteville, Doug was a member of Sequoyah United Methodist Church. He was a consultant for the Northwest Arkansas Land Trust. His hobbies included gardening and traveling, and he was the family genealogist. He is survived by Jean, his wife of 34 years, his son and daughter, his parents, two brothers and several nieces and nephews. ❀



Park Faces Many Challenges

Doug Faris' legacy was the emergence of the C&O Canal as a park that would be competitive in seeking support, not only to maintain it as it was, but also as a park worthy of improvement. The floods of 1996 became not a disaster, but a reaffirmation of the support for the park and its subsequent successes in addressing past needs. Needs still remain and the following is an account of what still has to be done. The growth and improvement of the park are testimony to his vision, and the following list would have been unthinkable before Doug came to the C&O Canal NHP.. - ed

Although the Association adopted the Monocacy Aqueduct and the towpath in Widewater as our particular projects over the last several years, the National Park Service constantly faces many repair, restoration and rehabilitation challenges to preserve the hundreds of historic structures that make up the canal and the park. Some of these are the result of storms and floods, but most simply reflect the continuous attention required to maintain these fragile and aging treasures. The following report summarizes a few of the projects that are currently in progress or in planning stages.

Georgetown: Interior rehabilitation of the Georgetown Visitor Center is in the final stages of design. The design plan connects the ground and first floors with a new stair and chair lift, making the first floor accessible. The ground floor, with its on-grade connection to the towpath and boat landing, will be the primary floor for canal boat ticket sales. The first floor will be used primarily for interpretive exhibits and a meeting room. The second floor will have enhanced office space, separate changing rooms for men and women, shower and restroom, and additional storage. The deteriorated HVAC system will be replaced and non-compliant electrical and plumbing systems corrected. Construction is expected to take place during the fall of 2004 and winter of 2005.

Winter inspections of Lock 3 and the basin above it revealed significant water infiltration through the walls causing undermining of the plaza between the canal and the Foundry building. A Georgetown structural engineering firm evaluated the lock and basin walls to determine the impacts on the canal boat operations. They advised that the constant filling and draining of the basin, required for boat operation, would continue to exacerbate the conditions caused by the water infiltration. From these preliminary investigations, various funding sources are being pursued to execute the required repairs.

Since the level 3 basin has been taken out of service, Lock 4 has been used as the boarding location for the interpretive boat ride in Georgetown. This use has apparently resulted in increased water infiltration through the walls of that lock as well. The same firm that performed the Lock 3 evaluations has been engaged to investigate the condition of Lock 4.

The National Park Service worked with the Georgetown Mall Associates on cyclic maintenance to two bridges spanning the canal between Wisconsin Avenue and Potomac Street which are owned by the Mall Associates. NPS issued a special use permit to govern repair activities, with emphasis on visitor safety and canal boat operations. Repairs included the strengthening of steel components, replacement of concrete decking, and repainting of all metal components. The project has gone along very well and comments received indicate that the contractor is one of the most courteous and cooperative in the Georgetown section of the park. Work was scheduled to be completed by the end of July.

The National Park Service owns three pedestrian bridges over the canal between Wisconsin Avenue and Key Bridge. These are at Potomac Street, 33rd Street, and 34th Street (the mule bridge.) By agreements with the District of Columbia dating back to the 1940s, the city is responsible for maintenance of these bridges. Cyclic maintenance has not been undertaken and now total replacement of the decks of both the 33rd and Potomac Street bridges must be undertaken. (The 34th Street crossing received preservation treatment by NPS in the late 1980s.) Currently, only the Potomac and 34th Street bridges are open to the public. The 33rd Street bridge was closed due to safety concerns. Repair work is being undertaken in conjunction with the DC Department of Transportation and the Federal Highway Administration. The project is in design stage. NPS has been actively involved in the review of project design documents.

DCWASA Odor Control Project: The District of Columbia Water and Sewer Authority Odor Control Project involves the construction of four odor reduction buildings. Two will be located on the Clara Barton Parkway and will be in the view-shed of the C&O Canal, at Little Falls Pumping Station and near the Beltway. The other structures will be at Fletchers Boathouse and the Anglers Inn parking area. Both of these buildings will contain visitor restrooms. The project is currently in the design phase. DCWASA has hired a new architectural engineer for this phase of the project. The project planning team met with park staff in May to discuss design details for the buildings at Fletchers and Anglers.

Little Falls Branch Culvert: (MP 4.76) This project will restore the upstream portion of the Little Falls Branch stream bank, culvert headwall, the historic canal berm, prism, and towpath. An extremely heavy rainstorm in 2001 severely eroded, undercut and, in some areas, totally washed out these structures. The project is complicated by the 78-inch sanitary sewer known as the Potomac Interceptor, which is located within the canal berm. The sewer, constructed in 1962, carries approximately 65 million gallons of raw wastewater per day to Blue Plains. DCWASA will reimburse NPS for work around the sewer main which will protect it from future damage. The overall project is 80 percent complete. Project modification is being drafted to

include cleaning debris out of the culvert barrel deposited during the September 2003 Isabel storm.

Widewater: All compliance has been completed for the repairs to the towpath at Widewater. The project package was submitted to the contracting office in July. The contract is scheduled to be awarded in September. Work will commence upon completion of preconstruction requirements.

Great Falls: Great Falls receives a significant portion of the park's visitation and provides an excellent opportunity to expose visitors to the story and significance of the canal. The Great Falls area comprised a small but bustling community in the nineteenth century. The Tavern, designated as the Crommelin House by the Canal Company, served variously as a hotel, tavern, store, clubhouse and restaurant prior to 1924. Historic photographs document grading, walkways, and other landscape features in a time period compatible to the focus of interpretive boat operation, the 1870s - 1880s. A key component of landscape design will be to develop a plan based on historic appearances that will also meet the vital operational needs of flood control and heavy visitation.

The existing landscape has been heavily modified since the canal ceased operations in 1924, including removal of all but two buildings, regrading of surfaces, alteration of circulation patterns, and installation of non-historic paving treatments. Three additional structures, including the comfort station and concession stand, were added by NPS between 1938 and 1970.

Park staff are working with landscape architects from the Nation Capital Region in the development of a cultural landscape plan for the Great Falls Tavern. A cultural landscape is a geographic area, including both natural and cultural resources, associated with an historic activity, person or event.. This report will define various development and historical zones. It will serve as a guideline for appropriate landscape treatments that can be incorporated into the Phase II construction plans for the Tavern.

Phase II of the Great Falls Tavern Visitor Center rehabilitation will ensure that the building meets the requirements of the Americans With Disabilities Act. In addition, the HVAC system will be enhanced to address severe moisture problems that are leading to major damage to significant cultural resources. The electrical system will be upgraded to eliminate code violations. Essential preservation maintenance will be performed on the structure to correct moisture problems and eliminate safety and health violations. The first floor museum areas will be flood-proofed in a sustainable manner. New public restrooms will be constructed near the existing concession facility. This is programmed for funding in FY 2005. Design development has been suspended pending completion of the cultural landscape report by National Capital Region cultural resource staff.

Four components of the Phase II Great Fall Tavern project will require an Environmental Assessment. They will be included in the EA for the Great Falls entrance road project. These issues are the new public restroom facility, upgrading the Tavern plaza to accommodate the removable flood protection barrier, a new air-conditioning chiller unit, and a replacement electric transformer.

The Great Falls entrance road project entails reconfiguring the

lower parking lot to create more open space and a historical appearance and the enhancement of pedestrian and bicycle access. The Environmental Assessment will identify improvements to the entrance road with four-foot shoulders as the preferred alternative; comparisons of 1:1 and 2:1 slopes along entrance road cuts for impacts to resources; elimination of the small parking lot near the historic zone, with bus and boat drop-off zones around the rotary; and the Tavern project components noted above.

Park staff met with representatives from the Federal Highway Administration and contractors in July to review the Draft EA. Project funding will depend on the completion of compliance documentation through the Finding of No Significant Impact. The project is expected to be funded in FY 2005.

WSSC Water Intake Improvements: Washington Suburban Sanitary Commission is undertaking a feasibility study to determine the best method to upgrade the intake at their River Road facility between mileposts 17 and 18 on the towpath. The current intake, along the river bank, collects large amounts of sediment and debris, most of which is generated in Watts Branch. WSSC is proposing to construct a submerged intake in a deeper river channel. The park service and WSSC are discussing a land exchange at the intake plant. There has not been a formal exchange of lands previously and the current undertakings will address this deficit. The land exchange will become a component of the Environmental Assessment for the proposed intake. The intake project will involve both temporary and permanent construction impacts to the C&O Canal.

Monocacy Aqueduct Stabilization: The Monocacy Aqueduct, largest and most impressive of the eleven aqueducts on the canal and considered an icon of early American civil engineering, was severely damaged in June 1972 by Hurricane Agnes. In 1974, under the supervision of the Federal Highway Administration, external bracing was added to the historic structure. The aqueduct endured additional flooding in 1985 and twice in 1996. Without the external bracing, the structure would have sustained great damage. The failing components of the 29-year old external bracing have long needed replacement. The project plan called for the external bracing to be removed entirely and replaced by internal bracing and highly specialized grout placement. Upon completion, the structure will closely resemble its original appearance. Work on the project has been slowed by numerous high water events over the last year, but debris removal and storm cleanup has been completed. Grouting was not as successful as hoped for but the contractor developed a new, improved process which has been approved and implemented. Work on spans one and two has been completed, and the external bracing removed from the first arch. The completion date has been adjusted to spring of 2005.

Chick Farm Agreement with Community Commons: A signing ceremony was held at the Monocacy Aqueduct on August 6 to formalize an agreement between NPS and Community Commons (CC) for the management of the Chick farm. The Chick farm is a 138-acre parcel located on the Frederick County side of the Monocacy River between the canal and the railroad. The property, which belongs to the park, is currently leased for

residential and agricultural use. Community Commons is a Frederick County-based 501(c)(3) non-profit organization dedicated to building a sustainable future for the Frederick region's social and natural resources through education, outreach and partnership building. The objective of NPS and CC is to open the property for educational and interpretive programs. The initial one-year agreement will allow CC to undertake a study to determine the feasibility of remaining an active partner with NPS at the farm. This study will include developing a site concept plan and conducting an archaeological review of the area. The agreement stipulates that the site concept plan will be jointly designed with the park before any changes are made. The park and CC were recently awarded a \$30,000 Challenge Cost Share Grant to help fund the feasibility study.

Point of Rocks Bridge Replacement: The project involves the replacement of the old pivot bridge across the canal at mile 48.2. The preferred alternative is to place a steel-beam bridge deck on the abutments. The deck would replicate the wooden span of the early 1900s, with the steel beams encased with lumber to replicate wooden beams. The steel beams will allow an upgraded weight rating of 15 tons. This rating will be compatible with the weight restrictions of the towpath and will allow heavier rescue and maintenance vehicles access to the boat ramp area. The plan also proposes lowering the masonry abutments by twelve inches to improve the sight line for motorists crossing the single lane bridge. Due to the proximity of the bridge to the multi-track CSX railroad crossing, safety was the primary issue for this proposal. By lowering the bridge and improving the grade for the south abutment, line of sight would be improved by 42 percent. The Maryland Historical Trust reviewed the project in 2003 and determined that this component of the proposal constituted an adverse impact to the bridge. The Environmental Assessment review period closed in July. If favorable feedback to the Environmental Assessment is received, a Finding of No Significant Impact can be processed. A memorandum of agreement with the Maryland Historical Trust will be developed to outline mitigation for the lowering of the bridge. Maintenance crews have been working to stabilize the historic stone abutments. This stabilization would have been undertaken regardless of the preferred alternative. The target date for bridge reopening is September 2004.

Potomac River Crossings: The Rumsey Bridge spans the Potomac River at Shepherdstown. It crosses the C&O Canal at the historic Bridgeport/Lock 38/Ferry Hill section of the park (mile 72.8.) The existing bridge, dedicated in 1939, has deteriorated and poses many safety concerns. Construction of a replacement bridge just upstream from the old structure is underway. The Maryland abutment and the Maryland shoreline pier have been completed and construction of the river causeway, necessary to construct the mid-river pier, is underway. Placement of steel girders between the Maryland shoreline pier and the Maryland abutment this summer will force temporary towpath delays of 15 minutes for park visitors as a safety precaution. NPS staff have worked with project managers to ensure visitor safety through the work zone during girder installation. The towpath will be enclosed to protect the public from falling debris. This shield is

expected to remain in place until the bridge deck is established. The shield will have open sides for light and a solid roof. Subsequent girder placement will not require towpath delays other than short closures for trucks crossing the towpath with bridge components. Upon completion of the mid-river pier and girder placement, the remaining new bridge work will be conducted from the bridge deck. The project calls for the demolition of the existing bridge. Towpath closures are possible during the demolition.

The Maryland State Highway Administration has initiated a study for improvements to Interstate 81 from the Pennsylvania border to West Virginia. The C&O Canal will be affected at the I-81 crossing of the Potomac River, just south of Williamsport (mile 98.5.) Currently, there are dual two-lane bridges that carry the north- and south-bound lanes. MDSHA and park staff met in June to discuss the preferred option. The current preferred option is to widen the bridges toward the inside. Park staff expressed concerns regarding impacts to park resources, but state highway engineers felt that all work could be accomplished without impacts to the park.

McMahon's Mill Stabilization: McMahon's Mill is located in the Big Slackwater area of the park (mile 88.1.) The 170-year-old structure is highly visible and is a local landmark for park visitors. Stabilization will include removing deteriorated roofing, installing a galvanized metal roof and guttering system as a temporary treatment to stop water from damaging interior timbers and flooring, and repair of framing and exterior skin materials. The National Park Service Historic Preservation Training Center will execute the work, with a planned start in mid-August.

Williamsport Bridges: Design work is underway for the rehabilitation of the Bollman Bridge that crosses the canal at mile 99.65 in Williamsport. The bridge, constructed in 1879, is a combination wooden trestle and overhead steel truss. Both sections have wooden decks. The bridge carries traffic over the canal to the Allegheny Power generating plant and to the sports fields and river access in the town-owned River Bottom Park. An inspection by the Federal Highway Administration in 2001 noted cracked gusset plates for the lateral bracing, a deficient railing system, and severe rusting of the steel bearing devices. The scope of the rehabilitation includes structural repair and limited rebuilding, replacement of the wooden decks, rebuilding the wooden trestle, repainting the steel superstructure, repairing the abutments, and replacing the pedestrian walkway. The project will be executed by Eastern Federal Lands Highway Division. Construction is anticipated for the summer of 2006. The bridge will be closed for up to six months.

Three options for repair of the Williamsport Railroad Lift Bridge were provided in the 1997 Inspection and Feasibility Study:

- (1) Stabilize in the lowered position with structural repairs;
- (2) Stabilize in raised position to allow passage of canal and towpath traffic, with the addition of new steel framing to support the plate girders;
- (3) Restoration to fully operational condition by structural

repairs, rehabilitation of the machinery, and reconstruction of the electrical equipment and controls. Congressman Roscoe Bartlett (MD 6th) has expressed interest in restoring the bridge to fully operational condition (option 3.) He would like to use volunteers to perform this restoration and has a contractor to do the painting. In February, park staff met with Congressman Bartlett and his staff, Maryland Dept. of Environment, Maryland Occupational Safety and Health Dept., and the painting contractor to discuss project issues. Park staff continues to work with the congressman's staff to identify potential contractors to volunteer their help to perform the restoration. Dennis McMullan, of McMullan & Associates Structural Engineers, is preparing a structural evaluation and recommended treatments report. Park staff and Congressman Bartlett are striving for work to be underway this fall.

Berm Road, Hancock: This project is located at the midpoint of a one-half mile rewatered section of the canal in Hancock. The berm of the canal serves as a local secondary roadway and carries school bus and other local traffic. The berm has failed due to saturation of the soil. Geotechnical findings indicate water is leaking from the canal and saturating the underlying strata causing the berm to collapse. The collapsed berm has forced NPS and the Washington County Highway Department to close the road to all traffic. Project design is underway. The schedule has slipped due to staff requirements on several other projects and special events at Hancock.

Save the Lockhouses: The park has received a \$150,000 Save America's Treasures grant for lockhouse stabilization. The grant, requiring a dollar-for-dollar non-federal match (cash or donated services), will directly support the stabilization of twelve lockhouses. The work will ensure that the structures retain their historic integrity while they are protected from weather and structural deterioration. Project design is complete. The contract should be awarded by the end of September and work should begin sometime in October

Compiled by Dave Johnson from National Park Service reports



Lock house 29, Lander

Fred Mopsik

WORLD CANALS CONFERENCE ONTARIO

Dave Johnson

The seventeenth annual World Canals Conference met at Brock University in St. Catharines, Ontario, in June. The conference was organized and hosted by the Canadian Canal Society. The theme of the conference was "Channels for Prosperity," focusing on the development of historic canals of North America and Europe for their recreational and tourism potential, and on the present and future of the Welland Canal, one of the world's great shipping canals. The conference celebrated the 175th anniversary of the opening of the first Welland Canal. It provided the opportunity to explore the historic 19th-century canals, which have provided a vital link between the Great Lakes and the Atlantic, joining Lake Erie and Lake Ontario and by-passing Niagara Falls since 1829, and to see the modern Welland, part of the St. Lawrence Seaway, in action. The three historic canals, although now abandoned, are becoming appreciated as valuable assets, and projects are being implemented to enhance all four canals as tourist and recreational attractions.

The present canal, built between 1913 and 1931, is the fourth in a succession of progressively larger waterways. The canal is 26 miles long and overcomes a difference of 326 feet between the levels of the lakes. This is accomplished by seven locks located in the northern eight miles, between Lake Ontario and the top of the Niagara escarpment. Each of these locks is 766 feet long (between the breast wall and the gate fender) and 80 feet wide; the average lift of the locks is 46.5 feet. The depth of water over the sills in the locks is 30 feet, while the depth of the water in the canal channels is 27 feet. Vessels up to 740 feet long, 78 feet wide and loaded to a draft of 26 feet can travel through the canal. An eighth lock, 1,380 feet long, at the Lake Erie end serves as a guard lock to control water intake and adjust for variances in the level of the lake.

Because of the steepness of the escarpment, Locks 4, 5 and 6 form a flight, (i.e., there are no ponds between them,) and ships pass from one chamber directly into the next. In addition, these locks have been twinned, with side-by-side up-bound and down-bound flights to keep traffic flowing smoothly.

The locks of the Welland Canal account for more than half of the total elevation change in the entire Seaway from the Atlantic Ocean to the head of Lake Superior.

On Monday, May 31st, about sixty early arrivals bused down to Port Colborne on Lake Erie to board the Dalhousie Princess for a day-long cruise through the Welland Canal to Port Dalhousie on Lake Ontario. Despite a steady rain, the trip was very enjoyable, with lots of good food and cold Moosehead.

Tuesday, June 1st, was set aside for the annual meetings of the World Canals Conference steering committee, the American Canal Society board of directors, and Inland Waterways International general membership. The official opening of the conference on Tuesday evening featured the premiere of a new one-hour documentary film on the Welland Canal, "Conquering Niagara," which was enthusiastically received.

Workshops and speakers during Wednesday, Thursday and

Friday morning sessions explored a variety of topics, including the St. Lawrence Seaway, the Erie Canalway National Heritage Corridor, Swedish and Welsh canals. Roger Squires presented a very interesting talk on the changing prosperity on British canals, and a panel of speakers representing the Rideau, Trent-Severn, Soo, Lachine and Irish canals discussed various engineering challenges and solutions.

Afternoons were devoted to field trips: to the City of Welland and Port Colborne on Wednesday, to Thorold and St. Catharines on Thursday, and finally to Old Port Dalhousie on Friday, where we saw remains of the old canals and enjoyed another cruise on Lake Ontario and into the lower end of the canal as far as Lock 1. The weather that day was so clear that we could see the CN Tower and Skydome in Toronto, about thirty miles across the lake.

Approximately 140 delegates, representing the United States, Canada, United Kingdom, Ireland, Sweden, France and Inner Mongolia attended the conference. The C&O Canal Association's delegation was one of the largest from any single organization. Association members attending included Barbara Collins, Sonny and Lynn DeForge, Steve Delanoy, Pat Haynes, Dave Johnson, Carl Linden, John and Gloria Lindt, Ken Rollins, and Pat White.

Dr. Roberta M. Styran, president of the Canadian Canal Society, was the conference chair, and she was ably assisted by members of the society and staff from the City of St. Catharines and Regional Niagara. The conference was extremely well planned and organized. All of the events and activities ran very smoothly and on time. The programs and speakers were very good, well prepared and relevant to the theme of the conference. The conference facilities at the university and the field trips, luncheons and dinners were first rate. Bobbie Styran and her associates should all be very proud to have hosted such a successful conference.

Scheduling the various committee and board meetings (ACS, IWI, WCC Steering) on the day before the conference was an especially good move. In the past, these have been squeezed into the conference schedule, often at inconvenient times or in conflict with other activities or with each other. I hope that future conference organizers will follow their lead on this.

The 2005 conference will be held in Sweden, in August. It will feature six canals in six days. The core conference, "Historical and Commercial Canals in a Modern Society," will be held at Trollhattan, on the Trollhatte Kanal. The post-conference tour will include the Gota Kanal and end in Stockholm. The 2006 conference will be held at Bethlehem, PA, hosted by the National Canal Museum and Lehigh & Delaware Canal National Heritage Corridor. At its meeting on June 1st, the steering committee awarded the 2007 conference to the Inland Waterways Association, which will host the event in Liverpool, England.

The World Canals Conferences alternate across the ocean, with North American sponsors hosting those in even-numbered years and Europeans in the odd years. The Chesapeake and Ohio Canal was the site of the fifth conference, in 1992. It was held at Harpers Ferry and was co-hosted by the C&O Canal Association and National Park Service.





Accompanied by the Past

by Karen Gray

History is the witness that testifies to the passing of time; it illumines reality, vitalizes memory, provides guidance in daily life, and brings us tidings of antiquity. Marcus Tullius Cicero (106 BCE - 43 BCE), Pro Publio Sestio

From Pearre to the Western Maryland Trestle at 143.4

Note: Mileages are taken from Hahn's Towpath Guide.

Just as the towpath user finds the history and character of the canal profoundly merged with that of the Baltimore and Ohio Railroad's historic mainline where it parallels the canal from Point of Rocks to Harpers Ferry, so those on the section featured in this year's Heritage Hike, will be similarly aware of the proximity and related history of the Western Maryland RY that parallels the canal as it approaches the Paw Paw Bends. Indeed, the timing of Western Maryland construction may have been one of the essential factors for the canal's survival, protection, and ultimate limited preservation as a National Historical Park.

That part of the story goes back to 1889 when the Potomac Valley suffered a devastating flood from the same massive storm that caused the break in an old Pennsylvania canal system dam and resulted in the Johnstown flood. The deeply-indebted Chesapeake and Ohio Canal Company was unable to raise the necessary \$250,000-300,000 necessary to repair and reopen the canal. After 61 years of existence since its organization June 20-23, 1828, the company entered bankruptcy.

By December 1889 "the Baltimore and Ohio Railroad had emerged as the majority owner of both the 1878 and 1844 Canal Company bonds, thus holding preferred mortgages on the physical property and the revenues of the canal" (Sanderlin, p. 263). The railroad's three choices were to purchase the canal, risk it being purchased by a competitor in a forced sale, or repair it at its own expense. As the first was considered too expensive, and the second was unacceptable, the latter was ultimately accepted as the least of three evils.

In the fall of 1890, after months of complex legal maneuverings by all parties involved, Judge Richard Henry Alvey of the Circuit Court for Washington County, suspended an order for sale of the canal, and oversaw a trial agreement with the B&O Railroad receivers to repair the canal and operate it on a nonloss basis. The canal reopened in 1892, but between 1896 and 1901 the B&O itself went into receivership and fell under the control of its rival, the Pennsylvania Railroad.

In 1902 the Western Maryland came under the control of a syndicate representing the interests of George Gould whose goal was to extend his inland rail empire to the Atlantic coast. One of the necessities for Gould's dream to be realized, however, was the closing of the gap between the Western Maryland terminus at Big Pool and Gould's West Virginia Central terminus at Cumberland. This was done between August 1, 1903 and March 15, 1906. But Gould himself went bankrupt and the Western Maryland also

entered receivership in 1908.

This history is important because it was not the trade the canal carried during its three decades in receivership, but the role it played "in the struggle between the railroads for control of the route it occupied" (Sanderlin, p. 272) that kept the court renewing its agreement with the receivers who operated under the threat of the sale of the canal. Ultimately it was the still highly desirable Potomac route between the Ohio and tidewater at the National Capital that preserved the treasure we will once again be enjoying on November 6.

Hikers will want to watch for the variety of important engineering structures on the two historic transportation routes (the C&O Canal and the WM Railway) followed on this walk. This begins with Lock 56 at Pearre, a station on the WMRY. The lock had a 7.7 ft. lift (rather than the usual 8 ft.). Like many of the structures in this upper end of the canal, the work done on it in 1837-1839 was incomplete, and the lock was not finished until work was resumed under a new contractor a decade later in 1848 and 1849. Note the date 1917 in the concrete on the upper gate coping.

The river along this stretch of the canal is part of the pool formed by Dam 6 (now largely gone) located more than two miles downstream from Lock 56. The Tonoloway limestone used extensively in Lock 56 and the aqueduct came from a quarry near the mouth of the Cacapon River in present day West Virginia, and from a quarry on the Little Tonoloway creek near Hancock. Rubble sandstone, where used, was quarried on Sideling Hill. (Davies 385-386)

Work on the Sideling Hill Aqueduct (No. 8 of the 11 on the canal) was done in 1837-1840 and completed in 1848. The aqueduct has a single, asymmetrical, elliptical 110 ft. arch with a 50 ft. span and 12 ft. rise. It is 150 ft. long between the ends of the wingwalls. Its upstream parapet is gone, as is common because of the battering it takes during floods from the watercourse it spans and even more importantly, because the upstream wall is a far less substantial structure than that which carries the towpath. For example, the towpath parapet on this aqueduct is 7.5 ft. thick at its base and 7 ft. thick at the top. In 1874 the berm wall was removed and a wooden trunk put in. It gave way in 1885 and was rebuilt. A waste weir with a concrete frame for three gates and insert boards is on the berm at the east end of the Aqueduct. (Davies, p. 384-386)

On the berm just beyond the aqueduct is a 1905 Pennsylvania Steel Company Western Maryland bridge. On May 15, 1950, some of the cars from a WMRY derailment in this area ended up in the canal. (Davies p. 387) At mile 138.06 the east portal of the nearly one mile long WM Indigo Tunnel cuts through High Germany Hill, a ridge from the spine of Sideling Hill. [Hahn notes that the NPS 138 milepost is off by .23 mile.] This is the first of three Western Maryland tunnels across necks in Maryland created by the Paw Paw bends.

Lock 57 is the western end of what canal boatmen knew as the Three Mile Level, and the eastern end of the Five Mile Level. This lock also was partially built in the 1838-39 period and

completed in 1839. It is the last of the masonry locks until Lock 72 a mile above Spring Gap. Locks 58 through 71 are composite locks built with rubble stone and lined with wood (later replaced with concrete in some locks) an economy measure forced on the Canal Company as a consequence of the poor building stone found in their vicinity and the company's inadequate resources to pay for transporting stone from distant quarries. Even for this lock some of the stone had to come all the way from Hartz quarry on the Little Tonoloway Creek near Hancock.

During the 1837-1850 construction of the canal between Dam 5 and Cumberland which progressed slowly and sporadically with a major discontinuation between 1842 and 1845, temporary bridges were placed across the Potomac to carry materials from the Virginia (now West Virginia) shore. Not only was stone for structures transported across the river, but also material for embankments.

The mouth of Fifteen Mile Creek has apparently long been a way station for travelers in this remote part of Maryland. Kings Tavern was here in 1795, and Mrs. O'Queen kept a tavern here in 1811 (Hahn, p. 187). A diagonal .75 mile long ford in the river made this an important crossing. An early trail that passed through here was developed in 1760 by Maryland to allow the passage of sturdy freight wagons and later, by stagecoaches. This crude road was Maryland's challenge to the Virginia route used by Braddock to reach Cumberland. Much of this historic Maryland route is preserved today by Oldtown Road. The Fifteen Mile Creek's name comes from the fact that on the 1760 "new" road it was fifteen miles from Hancock to the east and fifteen miles to Town Creek to the west. (Hahn, p. 187)

Although begun in the 1838-1841 period, the arch was not laid until July 1849. The Fifteen Mile Creek Aqueduct was one of the last major works to be completed between Hancock and Cumber-

land when it was finished in 1850. It is a beautiful, single, semicircular arch aqueduct with a 50 ft. span, 10 ft. rise. It is 140 ft. long between the ends of the wingwalls and some of the pebbly conglomerate used in it came from the Pocono foundation along the crest of Sideling Hill in West Virginia, some 3.5 miles from this location. This aqueduct also has a concrete-frame three-gate waste weir on the upper berm. (Davies, p. 391)

At mile 143.33, walkers leave the towpath to circle back to Little Orleans on the adjacent road. Just beyond at mile 143.4 is the first of the six bridges used by the Western Maryland to cross the Potomac on its route through the Paw Paw bends. Only three of those crossings also required the railroad to cross the canal, as here, but wherever that happened the Western Maryland was charged by the B&O controlled receivership for the right to build the bridge pier and abutment beside the canal and towpath. Without the intervention of the Maryland legislature, such a right would likely not have been granted, but although forced to make this concession to their rival, it did benefit the B&O insofar as this income helped the receivers maintain the fiction that the canal was being operated in the black as required by the court arrangement.

Resources:

Davies, William E. (1999) *The Geology and Engineering Structures of the Chesapeake and Ohio Canal: An Engineering Geologist's Descriptions and Drawings*

Hahn, Thomas F. (1992) *Towpath Guide to the C&O Canal*, Revised Combined Edition.

Sanderlin, Walter S. (1946) *The Great National Project: A History of the Chesapeake and Ohio Canal*. Baltimore: The Johns Hopkins Press

CURRENTLY AVAILABLE

A limited number of copies of *The Geology and Engineering Structures of the Chesapeake and Ohio Canal*, by William E. Davies

The National Capital and Baltimore Sections of the American Society of Civil Engineers have designated the C&O Canal an Historic Civil Engineering Landmark. Still available is a book on the geology and engineering structures of the Canal, by William E. Davies, an engineering geologist with the U.S. Geological Survey and founding member of the C&O Canal Association. Davies' extensive professional work included: mapping caves in West Virginia, Virginia, and Maryland; making maps for the Army Map Service during World War II; site selection for the first underground defense installations in the US; research stations in Antarctica; Air Force bases in Greenland, Alaska, and Norway, missile silos in the US; studying coal refuse banks and tailings dams including 1539 maps showing landslide susceptibility and the coal tailings dam failure on Buffalo Creek in West Virginia.

Through all of these assignments and other professional work, Davies' first interest was the C&O Canal, an interest intensified by the memorable hike of the Canal in March 1954, led by Justice William O. Douglas. Beginning in the late 1940s, Davies investigated every foot of the Canal and the structures on it, making detailed notes, drawing diagrams of structures, and including

interesting historical observations. These were the raw materials for a book "to be" on the geology and engineering structures of the Canal.

Unfortunately, Davies died suddenly, before he was able to complete his "labor of love". Available is a 622 page book which contains Davies' complete field notes, drawings, and descriptions of the Canal. The book is an exemplary example of the work of a consummate engineering geologist. Davies wrote: "The Canal is a display of early engineering. Its 182 culverts, 11 aqueducts, six dams, and 74 locks are fine examples of 19th Century's engineering practice."

Note: 36 linear feet of Davies' C&O Canal files are in the Western Maryland Room of the Washington County Free Library, 100 So. Potomac St., Hagerstown, MD. For information contact Ms. Mary Baykan, Director of the Library, or John Frye, curator of the files, both at 301-739-3250.

ORDER FORM: Please send ____ copy(ies) of the Davies C&O Canal book.

COCA MD members: $\$29.95 + \$1.50 + \$5.00 = \36.45 .

COCA non-MD members: $\$29.95 + \$5.00 = \$34.95$.

Non-COCA MD citizens: $\$34.95 + \$1.75 + \$5.00 = \41.70 .

Non-COCA non-MD citizens: $\$34.95 + \$5.00 = \$39.95$.

Please send check or money order to: The C&O Canal Association, P.O. Box 366, Glen Echo, MD 20812.

THE NEWS FROM ENGLAND

Hal Larsen

When the Foxton Inclined Plane was built, its purpose was to get around a long flight of locks, but for a variety of reasons this didn't work out, and this remarkable innovation, the first of its kind, soon went into decline.

During the great project of building the Grand Union Canal from London to Birmingham, the builders encountered a 75-foot hill in a section known as the Leicester Line. Their solution was to construct a ten-lock flight to carry the boats over the hill. The flight was built in 1810, and the top summit route opened four years later. A trip through the locks takes about 70 minutes. With only horse-drawn wagons on muddy roads for competition, this long journey for each boat was no problem, even with backups of several hours.

When the railways came in the 1840s, the competition began to bite. In addition, a firm called Fellows Morton and Clayton (FMC), which operated the vessels that took coal from the north to London, wanted to use barges that were bigger than the narrowboats then in use. FMC promoted a takeover by the Grand Junction Canal Company, and ultimately in 1898-1900 the Foxton Inclined Plane, or the Thomas Lift as it was then known, opened to compete with the railroad traffic. The lift would serve three purposes: obviate water loss through leakage from the locks, speed up boat passage along the waterway, and enable the use of the larger barges.

The lift was designed by Gordon Cale Thomas and built by W. H. Gwynne of Hammersmith, London. The boats entered two wheeled tanks, or caissons, measuring 80 by 15 feet, each sufficient to hold two narrowboats or a barge. The tanks were filled with water and balanced each other. They were then transported sideways on rails between the two water levels, a 75-foot difference. The tanks moved simultaneously, one descending as the other ascended. A 25-horsepower steam engine powered the lift. The journey time of 12 minutes for two boats up and down improved speed tremendously. The use of the same water all day represented large savings, compared to the heavy leakage through the locks.

The lift worked well for a decade. But the locks at a place called Watford Gap were never widened, and the hoped-for barge traffic therefore never materialized. This made the lift uneconomic. The offending locks at Watford, a London suburb, were never upgraded and now serve mainly as an attractive feature on the Grand Union Canal.

The ten-lock flight was refurbished for night traffic in 1909. FMC wanted to use its steamboats for fast, nonstop boating, with the crews taking turns to sleep. FMC could thus compete with railway timetables.

In 1911 the lift was mothballed to save money, with all traffic

returning to the locks that have been in use ever since. In 1927 the machinery and other significant elements of the lift were sold for scrap.

The inclined plane is on the stretch known as the Leicester Section, an expanse on the Grand Union Canal that connects to the 4000-mile national waterways network. The lift was the largest and most modern when it was built. It was a spectacular achievement that inspired designs for similar facilities in continental Europe, where much larger modern lifts have been built since 1960. The Foxton Inclined Plane was never given the credit it deserved.

A group of interested persons got together in 1980 to form the Foxton Inclined Plane Trust with the aim to restore the lift to working order. A partnership formed among the trust, British Waterways, the Waterways Trust, Harnbouth District Council, Foxton Parish Council, English Heritage, and the Old Union Canals Society. The trust has already rebuilt the boiler house, which now serves as its museum. In 2000 a comprehensive feasibility study by consulting engineers W.S. Atkins indicated that full restoration was both feasible and desirable. According to the IWI News January 2004 issue, the Foxton Lock Trust received \$2.6 million from the Heritage Lottery Fund. This funding will not cover the incline's restoration but will make it possible to rewater the upper and lower approach channels, necessary before full restoration can be undertaken. The fund will also enable improvements to both the inclined plane and the flight locks.

The entire restoration is projected to cost about \$14 million. The planners anticipate that about 70,000 people will visit the site annually. The project will provide 20 full-time jobs to operate the museum and to operate and maintain the lift. The planners expect the lift to inject about \$1.8 million into the economy each year.

It is a novel idea to restore to use something that never worked when it was needed. Today the mostly recreational narrowboat traffic moves through the ten locks, vacationers being in no hurry. Will they load their vessels onto the tanks for a quick trip over the hill? Whether they do might depend on how high the fees will be for this passage. No completion date has been set. The economic impact hasn't been established yet, but the money from the Heritage Fund is an encouraging step toward the substantial funding required to restore the lift. Why are the British so eager to restore this facility that may yield slight benefit compared to its cost? Surely not just because it's there. More likely these enthusiasts were motivated by the fact that the Foxton is historically important for having inspired the establishment of inclined planes in other countries. ❁

THE FIFTIETH ANNIVERSARY HIKE

One Walkers Memories of the C&O Hike With Justice Douglas to Save 189 Miles of Natural Beauty

Alice Gardner

This year is the 50th anniversary of the famous hike proposed by Supreme Court Justice William O. Douglas which saved the old C&O canal from being paved over as a highway. Warren F. Gardner, editor and managing editor of the Meriden, Connecticut Record was one of the 34 hikers who finished the 185 mile hike from Cumberland, Maryland to Washington, DC He wrote a series of six articles about his experience after the hike for his newspaper. The following story is based on telling of his adventure which he would speak of as "one of the highlights of my life." Warren died in January 2003 at age 94.

William O. Douglas was so impressed by Warren's editorial in the Meriden Record in which he praised Douglas's proposed hike idea as "an opportunity for men of good will to walk and talk together" that Douglas invited Warren to join the group for the famous hike to save the canal.

Preparation

In order to prepare for the grueling 185 miles in eight days, which would be about 22-24 miles a day, Warren decided to get in shape by walking home at 3 in the morning from his newspaper office in Meriden to his home in Southington, a distance of about seven miles. He was glad he did, as he reported that on the hike he experienced "relatively few of the muscular pains and stiffness which affected many of my colleagues." He did, however, suffer badly blistered feet during the eight consecutive days of walking.

The original plan for the trip called for each man to carry and come prepared to cook his own food. Warren had a rucksack which, when filled, weighed 28 pounds. He brought along a variety of dried soups, dried beef, and other dehydrated foods as well as a pound of dried apricots. As it turned out he didn't have to carry a backpack as the Wilderness Society arranged for a truck from the Potomac Appalachian Club to accompany the group and carry the packs. Three club members went along to help with the meals.

The Start

On March 20, 1954 as Warren looked out the train window of the special car the group used to Cumberland, he wrote about his misgivings. It was raining. "From the train window we could see stretches of the towpath which we were setting out to walk later. It did not look at all glamorous. It looked wet and sodden and cold, overgrown with bushes in many places and not at all interesting ... the thought of getting out and walking seemed positively forbidding at the time."

Rain was coming down hard when they arrived in Cumberland. Cars met the group and they were taken to a country club where an elaborate dinner was served in their honor. Cumberland in 1954 was in the throes of severe economic distress and the city

had the most to gain from a scenic highway along the old Chesapeake and Ohio Canal. Whether the hike could stop "progress" was a question when they started out. Maryland's U.S. Senator Glenn Beall, one of the leading highway advocates, presided at the dinner. "We were treated to a fine steak dinner and a flow of oratory in support of the highway."

That night the Justice and some others began an improvised canal song patterned after the traditional Erie Canal song. A new verse was added each day of the hike.

From Cumberland to Washington
Is one-eight-nine they say:
That doesn't faze this dauntless band
It's downhill all the way

After a night of pouring rain, the weather had cleared by breakfast and there was a "general atmosphere of excitement. Cumberland citizens eyed us with some amusement as we crowded outside the hotel waiting to start the walk. When the hike began 58 hikers had officially joined the group. There were experts on geology, geography, history, ornithology, and mammalogy. We were a starry-eyed lot. We hadn't taken our first steps yet. No one had any blisters or sore muscles; we were in a state of bliss and innocence."

There was some delay in getting the walk started as there were "incessant demands of photographers for pictures and more pictures as well as by the fact that Cumberland citizens who volunteered to drive us to the starting point could not agree on where to start."

The hike finally began at the site of an abandoned lock house at the western end of the canal. "This is not an endurance test," Justice Douglas stated flatly at the start. Warren wrote: "Those of us who were tenderfeet took heart at these words. But we found as we went along that strong element of endurance was required day to day." The longest day they hiked was 27 miles, the average per day about 18 miles.

"Tall, broad-shouldered, purposeful in manner and persistent in gait, Justice Douglas led the party the whole route. Few could keep up with his easy four mile an hour pace, but he was the first to encourage those who at the end of the day were weary. He was invariably on hand with a smile and a handclasp for those whose feet had been dragging."

At the beginning of the hike an authentic former mule driver named Skat joined the group. He was born and raised on the canal as was his father Charles Eaton and his grandfather Randolph Eaton. As a boy he had driven mules along the towpath until the canal was closed in 1923. Skat, his wife and two daughters accompanied the group part of the way. Skat presented Justice Douglas with an old bell which the mules had worn on the towpath years and years before. "The bell accompanied us on our trip, and its tones went out over the air on a national radio broadcast made at one point along the route."

The group camped out some nights and on others they were entertained at dinner and spent the night at some fishing and

hunting lodges along the way. The group spent their first night at a place called the Cardinal Club. The next day of the hike brought them to the Paw Paw tunnel, near Paw Paw, West Virginia, which Warren describes as one of the "wonders of the trip." The vaulted roof of the tunnel was covered with fine brickwork beneath the mountain and runs for nearly three quarters of a mile – "a memorial to human industry." He also noted that the tunnel was "dank and cool within... a rendezvous for bats, and there was a squeaking and flutter of wings as they flew past."

Because of a landslide on the towpath, the next day the group had to hike on a rock face for some time. After getting back on the towpath and following it for miles past a series of locks, they came that evening to Maryland's famous Woodmont Club, "an association founded by wealthy sportsmen who have directed their efforts over the years to propagating wild turkeys. The club had exhibits of stuffed birds and animals including a wild turkey which had been shot 75 years ago." Justice Douglas offered to give the club a mountain lion to add to their collection. The Justice had been hunting in Arizona earlier in the month and had lassoed a mountain lion, which he had subsequently shot with a revolver.

What They Saw On the Hike

The towpath, Warren relates, was lined with trees such as American elm, red maple, honey locust, osage orange, hackberry and box elder... birds were singing as Justice Douglas said they would. At times the group left the trail to save time and to add some variety to the hike. Once the group observed dip netting. Dip netting was a technique of fishing along the Potomac river. "Nets about four feet square are sunk to the river bottom and raised at intervals by a rope and pulley swung from a log boom. The catch is principally suckers." Other sights they saw were rare trumpeter swans, a great number of birds, turtles, woodchucks, deer, raccoon and some spring wild flowers. Poison ivy was also in abundance.

Gardner writes that on Thursday, March 25 "a new note was added to what had become a routine march." Aubrey Graves, outdoors editor of the Washington Post, brought three horses and a "frisky little burro named Jose" by truck to join the hikers. From then on some of the hikers rode horses part of the time. Aubrey's son Mack rode one of the horses. He was dressed in a uniform of a Confederate cavalryman and carried a Confederate flag. Quite by chance, Aubrey met up with Mack and his horse at an aqueduct. The group had to walk across, and he found himself striding across the bridge followed by the horses and the Confederate flag. He wondered what his grandfather and great grandfather, who fought to defeat this flag, would say if they had seen him.

People Met On the Way

The people the group met on the way were very kind. Townspeople came out to hike with them from town to town. It was from these people living along the towpath where the group learned the real sentiment about the proposed highway. The greatest proportion of them wanted no highway. They did want the canal improved... "put the water back in the canal" they said. "It used to be a good fishing place and it can still be."

Near Hancock about 100 schoolchildren turned out to greet Justice Douglas and his colleagues. Justice Douglas gave the

children a civics test. "I asked them how many Supreme Court Justices there had been since the beginning of the court. There were a lot of guesses, none of them very close. Then I asked them how many Chief Justices there had been to date and no one knew either".

At one point an "unseen benefactor" left a pile of apples for the group on an upturned flat-bottomed boat. At Taylor's Landing, Mercerville neighbors got together and made lunch for the group. This area was near the stretch of the Potomac which offered some of the finest bass fishing in the area and the canal, when filled, provided a breeding area for the bass. "The principle desire of the folks in Mercerville area was to have the canal filled with water again."

Boy Scouts of Troop 446 in Poolesville waited on tables and washed dishes at a buffalo steak dinner which was given to the group at the Izaak Walton club at Poolesville. At another point five Boy Scouts joined the group on the trail and camped out with them. At another point the group saw a message left by some Scouts. The note read: "No road. Protect our wildlife. B. S.A". There was one sign, however, along the way that said "Jackasses have traveled this road before."

As the group hiked, each day a new verse was added to the canal song. Some of the verses were:

O, the blisters are a-burning
And the tendons getting sore
While the shutter boys from Washington
Keep shouting "Just one more."

Many strange wild sounds we hear
Of fox and birds galore
But the funniest of all by far
Is the judicial snore.

The duffers climbed aboard the truck
With many a groan and sigh
But something faster passed them up
The Judge was passing by.

Last night we took to sleeping out
Beneath the open skies;
The ground was hard, the dew was wet
But the stars were in our eyes.

The knees are slowly playing out
The arches begin to drop;
If we had John Brown's body here
We'd like to make a swap

Saturday, March 27, 1954, was the last day of the hike. The group was on the trail by 6:30 heading for Washington. They hiked 16 miles from Seneca to Lock 5 where the group boarded the original Canal Clipper, which would be towed to Georgetown. Secretary of the Interior Douglas McKay was on hand to greet the party. "Raising his hat, the nattily dressed Cabinet member said with a smile," Justice Douglas, I presume."

Oh the towpath licks are standing
Oh the tunnel's still intact;
We know our friends will fight like hell
To stop the Cadillacs

Glory to the Immortal Nine
The waiting thousands roared
The conquering heroes hit Lock 5
And hurled themselves on board

"Crowds of persons came out from Washington to see us and walk the last few miles with us." By the time they got near Washington, the crowds numbered several thousand. "They lined the banks of the canal or walked along, keeping pace with the boat which was pulled by Dick and Dinah, the two mules. News photographers pictured our arrival." Canoes and other small craft greeted the party. One canoe contained two small boys and their younger sister. As the party approached, the boys hoisted signs which read: MAY JUSTICE (DOUGLAS) PREVAIL" AND SCRATCH THE HIGHWAY AT THE POST."

And now our journey's ended
Our aches and troubles gone;
"But blisters heal" so says the Post,
And memories linger on

On the last night of the hike, the Justice organized a committee that would make recommendations and draft plans for preserving and protecting the canal. He served as chairman of the group. This eventually became the C&O Canal Association. On March 31, 1954, the Washington Post printed a retraction of their editorial in favor of a highway. "We also believe that many semi-wilderness stretches along the old canal ought not to be disturbed. We urge our readers to investigate for themselves the wonderful potential of this scenic attraction - with respite from daily concerns- so close to the Nation's Capitol." After years of effort to preserve and restore the 189 miles of natural beauty, legislation creating the C&O Canal National Historical Park was passed in 1971. It is now one of the most visited National Parks in the nation.

The following year a reunion hike was called for by Douglas and hikes have been held ever since. This year is the 50th anniversary hike celebrating one man's efforts to save the Chesapeake and Ohio Canal and towpath. ❀

Reflections on My First 185 Mile Hike Honoring the Natural Beauty of the C&O Canal

Sonja Elmer

I embark on this spring adventure knowing no one, yet quickly making new friends, who over the next 14 days become my hiking companions and tent neighbors. I am here to honor my deep love of nature, to learn the lessons she has to teach and to pay tribute to those who worked to create and preserve this

beautiful area for future generations to enjoy and to become renewed.

Spring - a time of new beginnings for all things - including me. The hike begins on an unusually warm spring day and with each passing day more of nature's wonders make themselves visible. The battery of my cell phone dies the first day and I take it as a reminder that I do not need to communicate with the outside world but rather stay focused on the beauty and serenity of this place. Thus, I begin to see the life in all that surrounds me and I honor that life.

Virginia bluebells, daffodils, violets, spring beauties and eventually trumpet vines, phlox and may apples blanket the Earth with their quiet splendor. Red buds bring color to the landscape, evidence of beaver at work, birds chirping, baby frogs croaking and peeping, turtles of all sizes sunning themselves after a long winter under water. The rays of the sun beat down through the leafless trees, warming the body. Butterflies and birds surround me and the light breeze ripples the water and cools the skin. Hawks, woodpeckers, black snakes and my favorite blue/green scarab beetle who always shows up as I approach camp at the end of the day, as though it is coming to lead me to my home away from home. The deep blue sky is dotted with puffy white clouds. Bumble bees suck nectar from the bluebells. Eventually deer appear and vibrant green leaves spring forth on the trees until the canopy of green protects us from the bright rays of the sun.

I witness the many faces of the Canal, from sections containing little to no water with trees and shrubs growing out of the moist soil creating a swampy appearance to sections where the water is stagnant, covered with green algae - even covering the shells of the turtles that swim near the top of the water. In other sections the water is deep and clear and you can see the fish and turtles swimming near the surface. Rocky cliffs line portions of the canal, some with beautiful spring flowers clinging to the side of the rocks. An old maple tree over 100 years old stands tall with outstretched branches guarding Lock 26.

The silence is interrupted only by the singing of the birds and tree frogs and an occasional train whistle in the distance. I notice the sounds of my footsteps on the path and listen to the water hitting the inside of my water bottles. Otherwise just solitude, calm, serene, tranquil. A journey of renewal and rebirth.

We experience the multiple faces of weather from hot and humid with occasional breezes, to strong winds at night, to rain creating deep puddles on the path, to freezing temperatures when one had to bundle up with everything you had - or what others were generous enough to loan you - to stay warm.

The mornings after the rain bring the smell of spring and the fresh, alive, smell of the moist rich earth. Water clings to the bluebells. Intricate spider webs hang from tree limbs glistening in the morning mist. I marvel at the wonder of their creation and I again remind myself there is no rush - to take time to stop and enjoy the wonders of all creation. All is right in our insular world.

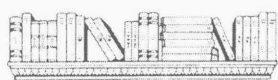
I look forward to slowing down and taking a more leisurely walk and view of things. In some respects that takes place, although the speed with which I walk does not abate. I accept my competitiveness. From time to time I stop and sit by the river and enjoy the view and tranquility that nature provides. I watch the water effortlessly flow by and notice that nothing in its path resists. Another wonderful lesson and reminder for life. I let go

of the thoughts that no longer serve me and send them downstream with the water. Once, as I return to the path, I come upon a small 100 year old cemetery with stone markers for three children of the Jenny family - ages 6, 4 and 1. I think about the pain of the family and mourn their loss.

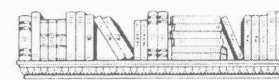
At the end of the long days of hiking we can cool ourselves in the river and sit and share stories. Laughter fills the air as it bubbles up from deep within us. Relaxed and at ease with new friends and companions. A community develops as we willingly help one another with camp duties or care for those whose day of hiking creates blisters and sore muscles, always pitching in to help when we see a need. Kindness abounds - one hiker, who lives nearby, makes delicious fresh muffins for all to enjoy, toe surgeries performed at all times of the day and night, reiki treatments, bonding, people offering unsolicited assistance from helping to set up tents to carrying gear to the baggage truck. One

of the best treats was provided by Norman Liebow, a volunteer member of the Bike Patrol, who appears on the tow path many mornings with his warm smile and offer of an ice cream treat for us to enjoy. A smile and a shared laugh and we are back to hiking. And, of course, we cannot forget Steve Delanoy, another Bike Patrol member, who posts encouraging signs along the path with extra bottles of water should we be running low.

On day 12 I hear my first airplane since the walk began. It signals a return to reality and the hustle and bustle of real life. A recognition that this idyllic adventure will soon end. Yet I carry within me an incredible sense of peace, calm, joy and well being. I am content. Solitude is my friend. That is where the secrets of life reside - in the quiet of our heart. Nature has done her work. May we continue to honor and accept all that she has to offer and be her voice when she is threatened so that others in the future may benefit from her healing energies. ✿



THE BOOKSHELF



BOOK REVIEW

Canals by Robert J. Kapsch

W. W. Norton & Co, in association with the Library of Congress, 310 pp, 2004

Reviewed by Dave Johnson

Bob Kapsch has created a fine addition to the literature of the American towpath canal era with this large-format volume. The book describes all aspects of canal development, engineering, construction, structures, and life. It begins with an overview of the development of inland waterway routes in the United States and the growth of the canal networks as they spread across the country with western expansion. This is followed by a chapter that examines the canal systems in each section of the country - New England, Middle Atlantic, the South and the Midwest - in greater detail. The chapter on canal structures covers the engineering and design of locks, aqueducts, culverts, bridges, dams, tunnels, and boats. Finally, two long sections provide a detailed visual journey along two canals of significantly different nature, the Morris Canal and the Chesapeake and Ohio.

The Morris Canal crossed the hills of northern New Jersey, linking the coal fields of northeastern Pennsylvania with the New York metropolitan area. Coal boats coming down the Lehigh to Easton, PA, could cross the Delaware River and enter the Morris Canal at Phillipsburg, NJ. From there, they had to overcome a rise of 716 feet to the canal summit and then drop 914 feet to Jersey City, a total elevation change of 1,630 feet in 102 miles. This was accomplished primarily with a series of inclined planes; locks accounted for less than 300 feet of vertical change. The twenty-three inclined planes were remarkable engineering feats, powered by water from the upper levels. For those interested in the appearance and operation of these structures, this section alone makes the book a must. Many of the photos illustrating this chapter were taken during the late nineteenth and early twentieth centuries and are from the collection of the Canal Society of New

Jersey.

The final chapter traces the Chesapeake and Ohio Canal from Georgetown to Evitts Creek. Most of these photographs were taken between the 1930s and 1960s, after the canal closed but before the beginning of significant stabilization and restoration by the National Park Service. Therefore, they reflect views of the canal which are not familiar to most of us from either current appearance or historic (i.e., pre-1924) photographs.

The book is illustrated with 555 images - photos, drawings, plans and maps. There is a comprehensive bibliography of about 90 entries and a glossary covering generally technical and engineering terms. The book is thoroughly indexed.

Bob Kapsch is well-known to many members of the C&O Canal Association. A member of the association himself, he has spoken at several of our events. Bob is currently the National Park Service's senior scholar in historic architecture and historic engineering. He served as chief of the Historic American Building Survey/Historic American Engineering Record (HABS/HAER) for fifteen years, and prior to appointment to his current position he was special assistant to the deputy director of the park service. In that capacity he served assignments as project engineer for several projects in the C&O Canal NHP, including the Monocacy Aqueduct restoration and the Great Falls Tavern rehabilitation.

Canals is part of a series called the Norton/Library of Congress Visual Sourcebooks in Architecture, Design and Engineering. A project of the library's Center for Architecture, Design and Engineering, each volume in the series is intended to serve as an entry to the general and special collections of the Library of Congress, providing a treasury of select visual material, much of it in the public domain, for students, teachers, researchers and historians. An accompanying CD-ROM contains high-quality, downloadable versions of all the illustrations, and offers a direct link to the library's online catalogues and image files, and data files in the HABS/HAER and other collections. ✿

FROM THE ASSOCIATION

From the President

Many of you know by now that Doug Faris, the former Superintendent of the C&O Canal National Historical Park has passed away. We are very sorry to hear of the death of this dynamic man.

How fortunate we were to have this man come to us at just the right time. Shortly after he came to our park it was hit by two "hundred year" floods in one year, 1996. With his dedication and skill he marshalled public and private forces and restored the canal to a condition exceeding that which existed prior to the floods. He saved the C&O.

He supported our efforts to save the Monocacy Aqueduct. Doug provided exceptional direction and leadership to his staff and to all in COCA who worked with him. These are just a few of the many achievements that occurred during his tenure. His energy and enthusiasm were tireless. COCA has lost a dear friend.

The Special Projects Committee will be working with the Park Service to create a memorial that will be a token of our personal and professional respect and admiration for him.

Christine Cerniglia



From the Editor

There comes a time when it becomes apparent that one has to move on. Nothing ever stays the same, nor would we want it to be that way. Repetition becomes numbing and loses its meaning. This has been commented on in many ways; even in such comedies as *Modern Times*.

I have been producing *Along the Towpath* since the year 2000, and now find that it is time to move on. New activities and concerns have arisen over these years, all requiring attention. The initial challenge of polishing the issues is now over. It is time to leave the job to someone new.

Certainly, the tenure will end with the completion of the 50th Anniversary Douglas hike, as well as the passing of Doug Faris, who did so much to elevate the status of the park, two major milestones in the park's history. The park is about to enter a new phase in its existence, and already it is becoming clear that the issues will be changing from creation and completion to that of preservation of what is there. Whatever happens, the park will remain a very special place for me, having marked many milestones in my life.

When I took over *Along the Towpath*, I set out to recast it as a source of news about the C&O Canal NHP as well as the Association itself. I also tried to polish its appearance and style in my own eye, a privilege of an editor. I have always tried to be considerate of all the contributors, who are paid as well as I have been and whose contributions were most appreciated. I hope that I have succeeded in producing an enjoyable newsletter. That was my intention. I would also like to thank the editorial committee who did such a good job in correcting the drafts. It made my job that much easier and even gave me an additional challenge in

reconciling the differing corrections with the author's original intent to produce something even better. I certainly welcomed the positive comments that I have received from the membership.

Whoever takes over, of course, will have the freedom to throw out all that I did and remake it in their vision, that is their prerogative. Whatever happens, the new editor should bear in mind the tale of the late Sir Roy Jenkins, former Chancellor of the Exchequer and the writer of many acclaimed books, including the one on the life of Winston Churchill. At a lecture sponsored by the Smithsonian Institution on his latest book, he addressed the question as to how well a book can be edited. He confessed that after many rounds of his own editing, as well as that of the publisher, at that time he knew of over 70 errors and the list was growing. Furthermore, no book was ever error free.

You just do the best and learn to ignore adverse comments. For those who insist on being critical, remember that they are not perfect either, even Shakespeare had errors.

Fred Mopsik



Request for Nominations

The Nominating Committee invites Association members interested in giving of their time and enthusiasm to the management of the Association to run for election to the Board of Directors. Officers (President, 1st and 2nd Vice Presidents, Secretary, Treasurer and Information Officer) serve 1-year terms; the 15 Directors serve 3-year terms, staggered so that 5 of the 15 Directors' terms expire each year.

Board membership is an unparalleled opportunity to help chart the Association's future course as well as to participate in its current management.

Board meetings are held every other month, alternating between Glen Echo and Williamsport. Elections are held at the annual meeting in March.

Any members who want to throw their hats in the ring or who want further information are requested to contact the Nominating Committee chair, Don Juran, at 301-231-8622 or drj5@cornell.edu.



★ NOTICE ★

Association Funds may not be committed without approval by the Board. Requests for funds not previously authorized should be sent to the appropriate committee chair or an officer for presentation to the Board.

Heritage Hike

November 6, 2004

This Year's Heritage Hike will be in the Little Orleans area with several hike options. At 10:30 AM, Saturday, we will meet at Bill's Store in Little Orleans, which is accessible from Route I68. If you want a 4.5 mile hike, a bus will take you to Pearre for the hike back to Bill's store. For those who want a longer hike you

can continue hiking on to the Devil's Alley Hiker-Biker campground. You can return by the towpath until you reach the Western Maryland RY bridge, at which point you can cross over to the paved RY bed and continue back to Bill's store.

A sign will be posted at the crossover point. This will add an additional 5.0 miles, or you can start at Bill's Store and walk the 5 mile section to Devils Alley campground and back.

The happy hour and dinner will be at the Orleans Volunteer Fire Department. Joel Auchenbach will be the guest speaker at the dinner and will have a book signing of his new book, *The Grand Idea*.

Happy hour starts at 4:30 PM and dinner 5:30. Reservations are \$12 per person and must be received by October 29. No

reservations are needed for the hike.

Directions

From the DC area, take I270 to I70 west past Hancock. Continue on I68 where I70 turns north. Go over Sideling Hill and take Orleans Road at Exit 68. On Orleans Road, go approximately 5.5 miles. At the bottom of the hill, turn left to Bill's Store on the left. Allow 1 hour 45 minutes from the Beltway. The Volunteer Fire Department is located on the right side of Orleans Road coming from Bill's Store, just before you reach I68. If you need more information, or additional instructions, please call Sonny DeForge at 301-530-8830



2004 Douglas Memorial Hike Participants

Lisa ANGSTADT*
Pat BARNETT-BRUBAKER
Lauren BRUBAKER
John BETTING
Kevin BRANDT
Nancy BRANDT
Bill BURTON
Chris CERNIGLIA
Wayne CERNIGLIA*
Joe D'AMICO*
Steve DELANOY
Arlene DREWES
Kristine DUDLEY*
Sonja ELMER*
Stacey FITZSIMMONS*
Carol GALATY
Laura GILLIAM*
Neil GILLIAM*
Karen GRAY
Nancy HARTMAN
Robert HARTMAN
Jim HEINS
Gil HILL
Bill HOLDSWORTH
Patricia HOPSON
Sharon HOUSE

Don JURAN*
Louis LABORWIT*
Phyllis LABORWIT*
Pam LANTZ
George E. LEWIS JR*
Mike LEWIS
C.Gage LINDEN*
Carl LINDEN
Dave LIPSKI
Sue LIPSKI
Walter LIPSKI*
Nancy LONG
Larry MILLS*
Elizabeth MILNER
Fred MOPSIK*
Judie MOPSIK*
Lou ODOM
Bob PERRY*
Tom PERRY
Gary PETRICHICK
Jim PRESTON*
Carol PURCELL*
John REED
Mickey REED
Tom REID*
Marion ROBERTSON

Ken ROLLINS
Paula ROSASCO*
R. Winona ROWAT
Nasra SAKRAN*
Barbara SHERIDAN*
Dorothy SKINNER
Leo SNARR*
Jack STICKLES*
Richard STOLL*
Cathy Douglas STONE
Porter VENN
Eliane VINER
John VINER
Lorraine WEAVER*
John WHEELER*
Val WHEELER*
Pat WHITE*
Sheila WICKOUSKI*
Dan WILLARD
Linda WILLARD
Betsy WILLIAMSON
James WILLIAMSON

* Complete hike

❁ NATURE NOTES ❁

Fred Mopsik

In recent years there have been many discussions as to what is "good" science. The discussions are usually made by people with little or no scientific background. The usual exercise is to find some publication that claims to refute current thinking on an issue and use that to cast doubt or even the opposite opinion on the issue under discussion. These days, typically, the refutation has political consequences. Also, the discussion is framed with an implicit assumption that there is one answer and "good" science will find it. If there is any doubt, it is not "good" science and one is free to ignore the consequences.

About 40 years ago C. P. Snow addressed the question of the two cultures, one liberal arts, the other science, and made what he felt was a disturbing conclusion, that whereas a scientist is expected to be conversant in the arts, the opposite is not true. He then predicted that society could seriously go astray. All of these writings were prior to environmentalism and issues that led to the formation of the C&O Canal NHP. If he were alive today, he would probably claim vindication.

Science is a very hard subject to pin down and for all of its great successes, has never had the claim of being absolutely correct. Indeed, such a claim is completely at odds with what science claims to be. As a practitioner, I had to learn how to handle contradictions with my own work as well as that of others. This included references to current thinking, usually called theory. The answer need not be simple, and in all cases had to refer to the limits of one's knowledge and ability to measure. In most cases the final answer had to be a thorough analysis and integration of both viewpoints. This could include the reason as to why another answer was not correct.

All measurement is subject to error, there can even be fundamental limits to the error. A good experiment tries to establish bounds to its accuracy, but even those can be hard to estimate. Surprisingly, statistical limits are usually the easiest to estimate, others are much harder. Even in the hard science of physics, the value for the speed of light between differing investigators has often been outside the claimed limits of accuracy, sometimes leading to claims of the variability of its value. Good science (no quotes) looks into all the measurements and tries to establish the reason for the discrepancy. Usually, and in this case, always, it is found.

Even mathematics is not immune to argument. There are now arguments between constructivist and analytic branches, which sometimes lead to apparent contradictions. I have had the opportunity to do some work where the analytic answer is unknown, but must exist, and yet computationally is actually impossible to obtain. Both results are provable, so that this is not "bad" mathematics. It is rather an understanding of the word answer and why mathematical logic has to go far beyond simple syllogisms and can seem so difficult to understand. For physical measurements, the results in question can set real limits to one's

knowledge.

Not all science is measurement, it also includes observation and description. The biological sciences of zoology and botany are examples of this. Quantum mechanics has little to say as to whether a great blue heron has a crest or not. An old argument, which was prominently discussed in high school science classes was whether there is such a thing as spontaneous creation. The usual example was when a piece of meat was left out, in the days before air conditioning and window screens, the worms that appeared in the meat were the result of spontaneous generation. The scientific experiment to prove the negative was to use a form of screening so that flies could not land on the meat.

To this day there are arguments about the proper way to classify plants and animals and the accepted answers do change. Even common garden plants can be renamed this way. Last year, Judie wanted to buy some helichrysum for some flower pots. The plants that she had in mind bore no resemblance to a flower we grew years ago with the same name, with a common name of strawflower. The seed catalogues that carry this plant no longer call it helichrysum.

Another example involves the fruit of a tree that for me has a strong association with the C&O Canal, the paw paw. If the fruit is big enough, small ones can be astringent, and also be gathered, they are a treat to eat. The flesh is quite soft, yellow, and smooth, very aromatic and a flavor that I compare to a combination of raspberry and banana. The problem is that on one day they are green and on the tree, the next almost completely disappear. If one is found on the ground, it is clearly partially eaten, with large pieces missing. The question is as to who is eating the fruit.

Several years ago, I found some plants and planted them at my house. This year one of the trees finally bore fruit, nice large ones of excellent flavor. One or two fell on the ground and already had some holes in them. I did notice that one of the holes had a whitish mass in it, which resembled insect eggs. The other day the complete answer was found. In the hole was an active group of beetles rapidly eating the flesh. I did not recognize them, but they were clearly no large animal, worm or slug, the beetles being no longer than one-eighth of an inch. This too can be science.

What is safe to say is that science can and does evolve. If one goes to a library and reads scientific journals from as recently as 100 years ago, the articles have an antique feel to them. Often the conclusions are now not the same. What has happened however, is that the newer answers include the older ones. Three hundred years ago, Maria Sybilla Merian described the metamorphosis of insects and described this with a set of beautiful colored drawings that are now collectible as art. Today, we describe the molecular basis for this change and what molecules cause it. ❁

Level Walker Chair Bill Burton

With the mild Fall-like days scattered between the humid more seasonal days this summer, the Level Walkers have been out in force. To date this year, 110 reports, covering 50 levels, have been received. This leaves only 19 levels not yet reported on during 2004. If you have not had a chance to cover your level so far this year, the upcoming Autumn days would be the perfect time to get out and enjoy the Park, as well as support the Association's Level Walker Program.

Level Walker vests are now available for active Level Walkers to purchase at the Association's cost. The vests are blaze orange with dark green lettering on the back stating "C&O Canal Association, Level Walker" with a graphic of a canal boat and mules. These vests are adjustable so "one size fits all" and will also fit over a heavy jacket. The cost is \$10.00 each and orders can be sent to Bill Burton, 6400 Halifax Ct, Warrenton, VA 20187. Checks should be made out to the C&O Canal Association. Vests will also be available for purchase at the upcoming Heritage Hike in Little Orleans on November 6th.

Highlights from the reports received from June through late August:

Level #1: *Tidelock to Incline Plane*; 6/12, 6/18, 6/30, 7/14, 7/23, 7/30, 8/6, **John Barnett** reported a kind park visitor stopped and helped him clean up the aqueduct area, which was a mess from partying. Also, the high waters in the Potomac had washed a large amount of debris and logs around the Tidelock area.

Level #3: *Lock 5 to Cabin John Creek*; 8/8, **Derek** and **Laura Byerlee** found little trash on the towpath, but noted there was a lot of trash off the towpath that could use a group cleanup this Winter.

Level #4: *Cabin John Creek to Lock 14*; 7/10, **Carolyn Reeder** provided excellent pictures of erosion above Milepost 8, cable disarray at lift lock 12, and crumbling stonework at Locks 13 and 14.

Level #5: *Lock 14 to Bridge at Cropley*; 8/8, **Bobbie Thorberg** noted there was tent caterpillar, or similar infestation, in trees around MP 12 and Cropley, also there were approximately 500 visitors in that part of the park on a beautiful day.

Level #7: *Great Falls Tavern to Swains Lock (21)*; 6/27, **John Belz** reported the parking lot at Great Falls was nearly full on a beautiful Sunday.

Level #9: *Pennyfield Lock (22) to Seneca Aqueduct*; 6/18, **Mike Schuchat** noted the water level in the river was high and observed a Great Blue Heron feeding at Pennyfield.

Level #10: *Seneca Aqueduct to Milepost 25*; 6/4, **Carol Purcell** startled an osprey, with prey in its talons, from of a tree and also found several four-leaf clovers.

Level #12: *Sycamore Landing to Edwards Ferry*; 6/12, **Stephen Pollock** reported

the towpath was extremely muddy after the recent rain, but very little trash.

Level #13: *Edwards Ferry to Harrison Island*; 6/12, **Stephen Pollock** noted that about 10 bikers on a ride organized by the Alzheimer Association rode 50 miles from Carderock to Whites Ferry and back.

Level #16: *Woods Lock (26) to Monocacy Aqueduct*; 8/1, **Michael Ciansiosi** removed 1½ 30 gallon bags of trash and noted work on the aqueduct continues with fewer large pieces of equipment.

Level #18: *Nolands Ferry to Point of Rocks*; 5/18, **John** and **Patty Hawley** noted the towpath was very muddy after the recent rains, but relatively free of trash. 7/5, **Jed Tucker** reported the broken trash bag box had been replaced and noted that the grass along the towpath and in the hiker biker had been recently mowed.

Level #19: *Point of Rocks to Catoctin Aqueduct*; 7/5, **Jed Tucker** reported a broken tree branch partially blocking the towpath, but since the branch was still attached about 18 feet up the tree there was a possibility it could completely fall at any time. 7/18, **Marlow Madeoy** spotted a large bug that measured three inches long on a dead tree trunk. The sights and sounds on the towpath reminded him of the summer portion of Vivaldi's "The Four Seasons".

Level #21: *Lock 30 to Lock 31*; 6/7, **Ron Howard** noted the grass had been recently mowed and there was evidence that some large tree limbs had been removed from the towpath.

Level #24: *Dam #3 to Dargan Bend*; 6/21, **Howard McGowan** spotted a large 5 foot black snake on a very clean towpath.

Level #25: *Dargan Bend to Lock 37*; 6/6, **Don Juran** with **Adam Juran** reported

the towpath was in remarkably good shape despite a soaking rain the previous day and that two fallen trees had been recently sawed and removed. 7/1, **Charlie Brown** with **Howard McGowen** observed two deer, blue heron and a family of ducks and noted the towpath was in good condition and very clean.

Level #31: *Lock 40 to Marsh Run Culvert*; 7/28, **Mary-Fran** and **Todd Stotler** reported the Park Service has been working to resurface the towpath in this area, which was wonderful to walk upon, however the older sections were quite muddy.

Level #32: *Marsh Run Culvert to Dam 4*; 8/22, **Dave** and **Kathy Peterson** reported serious erosion on the river side of the towpath about 175 yards below Dam #4.

Level #34: *McMahon's Mill to Opequon Jct. Hiker-Biker*; 5/27, **Linda** and **Tom Perry** saw evidence of an illegal fire built in the middle of the towpath and noted that the recent high water did not seem to damage the towpath.

Level #35: *Opequon Jct. Hiker-Biker to Lock 43*; 6/30, **Dave Engstrom** traveled to the level by boat from WV and reported that the Park Service was mowing the grass along the towpath and the level was in good shape.

Level #37: *Falling Waters to Lock 44*; 7/8, **Russ Meinke** saw two deer and reported the level fairly free of trash compared to past trips.

Level #39: *High Rock Quarry to Nessle RR Bridge Piers*; 7/15, **Jean Swank** noted how the trees and vines made the towpath shady and cool on a hot day.

Level #40: *Nessle RR Bridge Piers to Dam 5*; 7/15, **Bill Hibbard** removed one bag of trash and commented the towpath was in

good condition, clean and dry.

Level #44: *Fort Frederick to Ernstville*; 7/5, **James Biasco** spotted several groundhogs that did not seem to be bothered by his approach until he was within several feet of them. 8/7, **John Bowman** encountered 64 bikers and noted there were 5 boats and a canoe in Big Pool.

Level #45: *Ernstville to Licking Creek Aqueduct*; 6/13, **Joe Kochendoerfer** spotted a muskrat and noted the many people were

on the WMRR trail rather than on the towpath.

Level #46: *Licking Creek Aqueduct to Little Pool*; 8/7, **Margie Knott** with **Barbara Shapiro** encountered numerous bikers, surprisingly on the towpath rather than using the WMRR bike trail.

Level #48: *Hancock to Round Top Cement Mill*; 6/3, **Bill Hibbard** noted that the canal had been drained at Hancock, apparently for repairs under the prism.

Level #53: *15 Mile Creek Aqueduct to Lock 59*; 6/24, **Eddie** and **Ann Bilezikian** reported the level recently mowed and sighted an eagle in a dead tree near mile 140. 6/11, 7/3, **Mary** and **Steve Huebner** encountered a group of boys on a canoe trip camping at Devils Alley Hiker-Biker. Level #54: *Lock 59 to Lock 60*; 8/14, **Dennis Kubicki** reported that branch tips on quite a few trees were brown from cicada damage. ❀

CALENDAR OF UPCOMING EVENTS

DATE	DAY	EVENT
Oct 23	Sat	Life and Death on the C&O Canal, Great Falls Tavern. Time 6:30 to 9:00 PM. Witness dark but actual events which took place. Reservations required. Call 301-767-3714 or 301-299-3613.
Oct 30	Sat	*Continuing Hike Series. Meet at Great Falls Tavern, 12:00 Noon Contact Pat White, 301:977-5628. (Section A, Billy Goat Trail)
Oct 30	Sat	Potluck Cookout at Carderock, 4:00 PM. Contact Pat White, 501-977-5628.
Nov 6	Sat	Heritage Hike at Little Orleans. More information and registration form in this issue.
Nov 21	Sun	Continuing Hike Series. Meet at Balls Bluffs in Loudon County, 10:30 AM. Contact Bill Burton, 703-306-6303 (work number).
Dec 4	Sat	Frostbite Hike. Meet at Fletcher's Boat House, mile 3, 10:30 AM.
Dec 5	Sun	Board Meeting, Glen Echo Town Hall, 1:00
Dec 12	Sun	Carol Sing at Great Falls Tavern, 1:00 PM.
Dec 31	Fri	New Year's Eve Hike at Monocacy Aqueduct, 2:00 PM. Contact Pat White, 301-977-5628.
Jan 1	Sat	Continuing Hike Series. Contact Pat White 301-977-5628

* A signed Waiver and Release will be required for these activities. The Waiver and Release will be provided at the time of the activity.

Along the Towpath is published in March, June, September, and December by the C&O Canal Association (COCA), P.O. Box 366, Glen Echo, MD 20812-0366. Articles for publication should be received by the 15th of the month prior to publication. Electronic submissions are encouraged. Please send articles to:

Along the Towpath
P.O. Box 366
Glen Echo, MD 20812

Membership in COCA is open to all persons with an interest in the C&O Canal, the C&O Canal National Historical Park, and the Potomac River Basin. Annual membership dues are \$15 individual, \$20 family, and \$25 patron, are assessed on a calendar-year basis and include a subscription to the newsletter. Dues should be mailed to the C&O Canal Association, P.O. Box 366, Glen Echo, MD 20812-0366. COCA is a non-profit organization as defined by section 501(c)(3) of the Internal Revenue Code and all contributions are tax deductible to the extent possible. A copy of our current financial statement is available upon request by contacting C&O Canal Association at P.O. Box 366, Glen Echo, MD 20812-0366 (telephone 301-983-0825). Documents and information submitted to the State of Maryland under the Maryland Charitable Solicitations Act are available from the Office of the Secretary of State for the cost of copying and postage.

COCA maintains a home page at <http://www.CandOCanal.org>. The COCA Webmaster is Matthew James Teigen, barnacle@freeshell.org. COCA also maintains a telephone for information and inquiries at (301)983-0825.

C&O CANAL ASSOCIATION

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Committees (Contact the COCA telephone number or write to COCA)

Archives	Molly Schuchat
Projects	Carl Linden
Environmental	Peter Whitney/Fred Mopsik
Level Walkers	Bill Burton
Festivals	Rita Bauman
Programs	Sonny DeForge
Nature	Peter Whitney
Membership Coordinator	Barbara Sheridan
Editorial	Frederick I. Mopsik

Editorial Staff

Editor: Frederick I. Mopsik

Associate Editors: Dave Johnson, Don Juran, Carl Linden, Nancy Long, Judie Mopsik, Ken Rollins

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DIRECTORY C&O CANAL NHP Telephone Numbers and Personnel

C&O CANAL NHP HQTRS	(301)739-4200	
1850 Dual Highway, Suite 100, Hagerstown, MD 21740		
Superintendent	(301)714-2201	Kevin Brandt
Deputy Director	(301)714-2201	Vacant
Chief Ranger	(301)714-2222	Rob Danno
Admin Officer	(301)714-2204	Jeannie Denk
Chief, Natural and Cultural		
Resource Mgt Branch	(301)714-2231	Vacant
Chief, Interpretation	(301)714-2214	Bill Justice
Public Affairs Assistant	(301)745-5804	Kathy Sholl
Special Permits	(301)714-5817	Donna Swauger
Chief of Maintenance	(301)714-2216	Bob Hartman
Partnerships Coordinator	(301)714-2233	Vacant
Volunteer Coordinator	(301)714-2238	John Noel
Engineer	(301)745-5818	Dan Copenhagen

Palisades District

11710 MacArthur Blvd, Potomac, MD 20854		
District Ranger	(301)767-3720	Keith Kelly
Fee Collection Supervisor.	(301)299-3603	Paul Johnson

Georgetown Visitors Center	(202)653-5190	
1057 Thomas Jefferson St., NW Washington, DC 20007		
Sup. Ranger - Interpretation		Kathy Kupper

Great Falls Tavern Visitor Center

11710 MacArthur Blvd., Potomac, MD 20854		
Great Falls Tavern Information	(301)767-3714	
Sup. Ranger - Interpretation	(301)767-3702	Rod Sauter

The Palisades District begins at Milepost 0 (Tidelock) and continues to Milepost 42.19 (Monocacy River).

Western Maryland District

District Ranger	(301)714-2236	Dwight Dixon
Cumberland Subdistrict	(301)722-0543	Matt Huelskamp
Hancock Subdistrict	(301)678-5463	Lynn Barrett
Ferry Hill Subdistrict	(301)714-2206	Alex Negron, David Carter

Williamsport Visitor Center	(301)582-0813	
205 West Potomac Street, Williamsport, MD 21795		
Supervisory Park Ranger		Carla Beasley

Hancock Visitor Center	(301)678-5463	
326 East Main Street Hancock, Maryland 21750		
Park Ranger - Interpretation (part time)		Lynn Barrett

Cumberland Visitor Center	(301)722-8226	
Western Maryland Station, Cumberland, Maryland 21502		
Park Ranger - Interpretation		Rita Knox

The Western Maryland District begins at Milepost 42.19 (Monocacy River) and ends at the Canal Terminus, Cumberland, Milepost 184.5.

OTHER USEFUL TELEPHONE NUMBERS:

24-Hour Emergency	1-(866)677-6677
Georgetown Boat Operation	(202)653-5190
Fletcher's Boat House (Concessionaire)	(202)244-0461
Swains Lock (Concessionaire)	(301)299-9006
Carderock and Marsden Reservations	(301)767-3731

24-HOUR EMERGENCY (TOLL FREE) 1-(866)677-6677
HAZARDS CHO_Hazards@nps.gov

**CHESAPEAKE AND OHIO CANAL
ASSOCIATION**

Please Note:

Heritage Hike

November 6, 2004

Form enclosed

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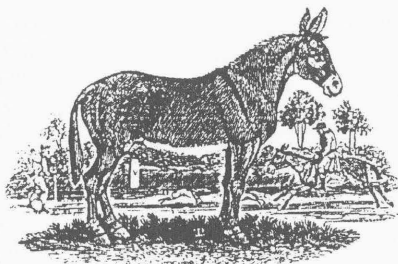
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The Mule