

ALONG THE TOWPATH

A quarterly publication of the
Chesapeake & Ohio Canal Association

An independent, non-profit, all-volunteer citizens association established in 1954 supporting the conservation of the natural and historical environment of the C&O Canal and the Potomac River Basin.

Volume LI

December 2019

Number 4

Rebuilding History: Locks 3 and 4

By Stephanie Spencer



*Lock 3 from the Jefferson Street Bridge
– Photo by Stephanie Spencer*

Introduction

Nestled in densely populated Washington, D.C., Lock 3 and Lock 4 represent just a portion of the rich history housed in the Chesapeake and Ohio Canal National Historical Park (C&O Canal). People venturing to work can't help but cast glances toward the tall stone walls towering on either side of a water-filled canal. The area offers solace from the business of city life. It's a small piece of nature and history amid blacktop and rising buildings. It's a place where people can learn about the area's history, eat a peaceful lunch or take a leisurely stroll.

Locks 3 and 4 are located within the first mile of the 184.5 mile-long C&O Canal. It may be easy to miss them, as this portion of the park runs straight through Georgetown and is partly concealed by surrounding walls and buildings. That changed when a recent National Park Service (NPS) construction project brought major attention to the area. In late 2016 a project began to completely rebuild Lock 3 and to repair Lock 4.

Reasoning

Due to sizable terrain changes within the first mile of the park, the Canal Company built four locks along this stretch of the canal to make up for the differences in elevation. As a boat passed through each lock, it was raised to a new "level" of water in order to make its way from Georgetown at Mile 0 toward Cumberland, Maryland, at Mile 184.5.

During an inspection in 2004, NPS staff noticed a deficiency at Lock 3 – the walls were tilting inward. When 16-foot stone walls begin to move, a number of red flags arise. There were concerns for the canal, boat operations, safety and surrounding private property. Prior to and around this time, interpretive boat rides were ongoing within the lower miles of the C&O Canal. This ride consisted of a replica canal boat "locking through," or being raised, from Level 3 at Lock 3 up to Level 4 at Lock 4. The boat then made its way back through Lock 4 and down to Lock 3.

(Continued on page 6)

Notice of 2020

C&O Canal Association Annual Meeting

By Steve Dean

Announcement of Annual Meeting

The annual meeting of the membership of the Chesapeake and Ohio Canal Association will be held at 1 p.m. Saturday, March 14, 2020, at the Upper Montgomery Volunteer Fire Department, 19801 Beallsville Road, Beallsville, Maryland 20839. The meeting will be for the purpose of electing officers for 2020, electing a nominating committee for 2021, receiving reports of officers and committees, and any other business that may properly come before it. No proposals to amend the bylaws have been received for consideration at the 2020 annual meeting. All members of the Association in good standing are invited to attend. This notice constitutes the call for the meeting, pursuant to articles II.2, III.1, and IX of the bylaws.

Nominations for Officers and Directors

Officers, except directors, are elected at each annual meeting to serve a term of one year. In addition, five directors are elected at each annual meeting to serve a term of three years. The nominating committee, chosen at the preceding annual meeting, will present a slate of candidates. Additional nominations may be made from the floor at the annual meeting. Members attending the 2019 annual meeting elected Barbara Sheridan (Chair), Diana Dean, Steve Dean, Bob Hibbert, Tony Laing and Travis Medcalf to form the 2020 nominating committee. The committee has nominated the following candidates for election in 2020:

Bill Holdsworth – President, Rockville, Md.

I am honored to be nominated for the presidency of the C&O Canal Association, an organization that plays a vital role in maintaining one of the nation's historic treasures. I previously served nine years on the board of directors, including six years as secretary. I act as webmaster for the Association website and coordinate the broadcast emails. I look forward to the challenge of serving the organization as the president for a fifth year. I am a retired federal employee.

Rod Mackler – First Vice President, Arlington, Va.

I am the current First Vice President and chair of the environmental committee of the C&O Canal Association, a volunteer organization, which has provided support to the C&O Canal National Historical Park for over 50 years. I am an active volunteer in the park. I am also a regular participant in global canal affairs, having now attended 12 World Canals Conferences on three continents. I often structure my travels

in the United States so as to visit other historic canals and other canal buffs. Finally, I enjoy writing and the opportunity to share my love of the canal with others, including presentations and articles for several canal journals.

Anthony (Tony) Laing – Second Vice President, Olney Md.

I have been a member of the C&O Canal Association for 15 years. During this time, I have enjoyed participating in the paddling trips that the group sponsors, including the Paw Paw Bends weekend trip, the Monocacy River trip, the Brunswick to Monocacy trip on the Potomac, and trips on the canal itself. I backpacked the canal from Cumberland to Harpers Ferry in 1980, and I cycled the entire length from Cumberland to Georgetown in 2009.

I have been on the Board of Directors for two terms and I am one of the two Canoemasters who are responsible for the paddling trips.

I have a certain historical affinity to the canal as my great grandfather helped construct the canal in the 1830s. He and his two brothers got jobs digging the canal after they disembarked from a ship sailing from Hamburg, Germany to Baltimore. At one point they operated a boarding house in Oldtown before settling in Cumberland. I was born in Cumberland and now live in Olney, Maryland. I am retired from the U.S. Department of Education.

I would like to serve as Second Vice President to give back for all of the fun and growth that the Association has given me.

Kerry Gruber – Secretary, Gaithersburg, Md.

I've been an Association member since 2010 and joined the board of directors in 2015. I have also participated in hikes along the canal and several World Canals conferences. I was born in Baltimore and raised in North Chevy Chase, Maryland and Washington, D.C. My grandparents lived in the Burleith neighborhood of Washington, D.C. and painted scenes of the canal and Georgetown back in the 1930s. I retired from the federal government in 2012 as an education statistician. The beauty and history of the canal is something I enjoy sharing with others. It would be an honor to continue serving the Board as the Secretary.

Richard Radhe – Treasurer, Columbia Md.

I have been a member of the C&O Canal Association for over 15 years. For most of those years I enjoyed the hikes, canoe trips, dinners and the efforts of many dedicated members.

Seven years ago, I decided it was my time to contribute to the Association by accepting the treasurer position. It is an honor to work with former and current board members. It was exciting to implement inventory into QuickBooks to track the sales and distribution of Steve Dean's revised NPS 142 Handbooks and the updated Pocket Guides. I am an Enrolled Agent with a small tax practice which gives me the resources to prepare annual 990 nonprofit Tax Return, Sales Tax and Personal Property Returns. I look forward to serving in 2020.

Doug Zveare – Information Officer, Rosemont, Md.

I am honored to be nominated to serve a second term as Information Officer of the C&O Canal Association. I have been an Association member and a Level Walker for over 17 years. During that time I have completed over 52 level walks, participated in Association meetings and activities as well as having bicycled and hiked the entire towpath several times. I am active in the VIP program helping to install picnic tables, benches and waysides in the Park. I participate in the Association's stewardship of the Swain's Lock picnic area and campground and am completing my sixth year as a director on the C&OCA board. If elected, I will work hard to further the Association's continuing mission.

Jill Craig – Director, Keedysville, Md.

The canal allows me to combine two of my favorite activities – walking and local history. My interest in the canal began as a place to walk the dog along the river and in the shade. But it was more than a great walk, and its history became increasingly significant to me. I've been fortunate to put online the newspaper stories from Hagerstown which deal with the canal from the 1830s on, developing a website in cooperation with the C&O Canal National Historical Park and the Washington County Free Library focusing on the economic impact of the canal on Washington County, and adding to it William Bauman's research and Lesley Carter's photographs of culverts in Washington County. For the past five years I have been the Association's store keeper. I am both encouraged and challenged by the depth and breadth of the Association and its members' interest in the preservation of the canal.

Jim Hutzler – Director, Bunker Hill, W.Va.

I was born and raised in Inwood, W.Va. I graduated from Musselman High School and Shepherd College and hold a Bachelor of Science degree in Chemistry.

I've had several fascinating career paths over the years including a PhD program in Physical Chemistry at West Virginia University cut short by financial needs, teaching physics at the high school level, and two decades in the construction industry building several large hotels, apartment and condominium projects, and many single-family homes. Finally I've

spent the past two decades in the computer industry as a network engineer and consultant for a large international defense contractor and other smaller firms.

Along the way, I've also owned and operated several airplanes as an instrument rated pilot and performed many open water ocean and high altitude lake dives as a certified SCUBA diver. During the past decade, I became interested in hiking and spent many wonderful hours on trails in Utah, Arizona, and the Dolomites of northern Italy before being introduced to the C&O Canal. What a wonderful treasure! Since then, I've hiked the canal, assisted with level walking, attended various Association functions as a guest and become acquainted with many wonderful volunteers.

I am honored to be asked to run and I would be very pleased to serve on the C&O Canal Association board as a director.

Jonnie Lefebure – Director, Hagerstown, Md.

It's been a pleasure serving on the Association board for the last six years; I look forward to the prospect of another three years. I've been on the World Canal Conference planning committee since its beginning, and a member of the Canal Classroom Corps since its start in Williamsport in 2013. My wife and I are level walkers on Level 27 in the Sharpsburg area.

Bert Lustig – Director, Berkley Springs, W.Va.

I have served one term on the C&O Canal Association board of directors. I am currently the West Virginia Co-Chairman of the Western Maryland Rail Trail Supporters and have authored and supervised the production of all of the promotional materials: brochure, website and other media for that organization.

I look forward to continuing to support the work of the Association for an additional term.

Susan VanHaften – Director, Arlington, Va.

I joined the C&O Canal Association in 2005 and served as a level walker for many years. I also served as a director from 2010 to 2012, and then went on to serve seven years as secretary for the Association, leaving the board in 2019. I am currently chair of the Association's Special Projects Committee. I would be pleased to rejoin the board as a Director in 2020.

Elisabeth Groth – Director (1-year term), Hagerstown, Md.

Elisabeth accepted the challenge at the 2019 annual meeting to enhance the Association's social media presence. She has ably accomplished that task, and has not only expanded the Association's implementation of Facebook, but has established Association Instagram and Twitter sites. She has agreed to serve as a director, if elected, to fulfill the remaining year of Anthony Laing's term as director.

President's Report

By Bill Holdsworth

As I write this column, there has been no news on the selection of a new superintendent for the C&O Canal National Historical Park. But activity doesn't stop during this time of transition. The park staff seems as busy as ever. The Association's work continues.

Membership chair Will Stewart and I recently converted the Association's member database to a cloud-based commercial service, Wild Apricot. Our strategic plan recommended this transition as a means to improve communication with our members.

We are just starting to tap some of the features of Wild Apricot. We now generate our broadcast emails from the new software. You may have noticed a change in the appearance of those emails. We used Wild Apricot to handle registration for the Heritage Hike events. The software has the power to generate automatic emails for things like event registration or member renewal.

We will implement more features in the coming months. We'll probably have a misstep or two as we climb the learning curve. Your patience will be appreciated.

I was unable to attend the Heritage Hike. By all reports it was a successful event. Because of the Association's support for the recent rehabilitation of Swains Lock, our friends at the Canal Trust gave us a gift certificate for one night's stay at the lockhouse. We raffled that certificate off at the dinner.

William Bauman has worked with carpenters in Cumberland to accomplish some needed repairs on the replica boat there. The boat is a great interpretive resource, giving visitors an idea of what life was like on the freight boats that plied the canal.

Environmental assessments for park projects have kept our Environmental Committee busy. Recently they have reviewed documents regarding the redevelopment of the first mile in Georgetown, the planned park headquarters building in Williamsport, and roadway changes around Fletchers Boathouse. Rod Mackler and the other committee members are good guardians, always vigilant for changes that could negatively affect towpath users.

The Nancy C. Long Aqueduct Preservation Fund

By Bill Holdsworth

Nancy Long has given five decades of service to the C&O Canal. She continues to burnish her resume. Nancy has made a generous donation that allows the Association to create the Nancy C. Long Aqueduct Preservation Fund.

Aqueducts are key structures on the C&O Canal, picturesque as well as functional. Aqueducts are vital to the integrity of the towpath. Three of the 11 aqueducts have been restored, but much work remains to protect or restore the others. We are grateful to Nancy for the establishment of a fund to contribute toward that aim.

Nancy was president of the Association from 1978 to 1979. She has served many terms on our board of directors since then. In addition to her service on the Association board, Nancy was the first chairman of the C&O Canal Federal Advisory Commission in 1971. She established the commission as an active working group.

Nancy's interest in aqueducts is long-standing. In 1982 park superintendent Dick Stanton reported to the commission that three aqueducts were in danger. Going outside normal channels, she relayed the need for funds directly to Interior Secretary James G. Watt and the money appeared.¹

The Association will use the fund for any purpose that helps maintain the integrity of aqueducts. The tasks can range from routine debris removal to stabilization of an unrestored aqueduct to a financial contribution towards full restoration. All donations to the fund are welcome.

Note:

1. *C & O Canal, The Making of a Park*, by Barry Mackintosh, 1991, Chapter 8, National Park Service

Donors to Association Funds

August 1 to October 31, 2019

Ken Rollins C&O Canal Fund

– A revolving fund to support current projects and programs in and for the C&O Canal National Historical Park.

Davies Legal Fund

– Supports the Association's involvement in activities such as opposition to the transfer of public land to any individual or enterprise for private use.

Rachel Stewart Swains Lock Area Fund

– Funds improvements to the area around Swains Lock as they are identified in conjunction with the National Park Service.

2021 World Canals Conference Fund

– Funds to help support the 2021 World Canals Conference at the C&O Canal. The first \$10,000 raised will be matched dollar-for-dollar by an anonymous donor.

Nancy C. Long Aqueduct Fund

– Funds to support restoration and preservation of the eleven aqueducts on the C&O Canal. The fund was established with a generous donation made by long-time C&O Canal advocate Nancy Long.

Ken Rollins C&O Canal Fund

Tim & Kathryn Banfield
Natalia Baran
Ed & Kathy Bury
Monica Hanna
Kathy Helt
John & Carol Kimbrough Jr.
Linda & Michael Marmer
John W. Newland III
Saurabh Pathak
Erica & Patrick Saccia Jr.

In Memory of Randy Astarb

Jane & Norman Liebow

In Memory of Rachel Stewart

Keith Allen
Carelyn Campbell
Pamela K. Lantz

Davies Legal Fund

Robert & Jane Dowler

Rachel Stewart Swains Lock Area Fund

James & Barbara Moore

2021 World Canals Conference Fund

Daniel Mick

Nancy C. Long Aqueduct Fund

Ruth & Nancy Long

C&OCA Welcomes New Members

Earl Houseman, Au Gres, Mich.

Jim Hutzler, Bunker Hill, W.Va.

Melody Miles, Greencastle, Pa.

Matthew Rockwell, Frederick, Md.

Huey Preston, Washington, D.C.

Robyn & Jon Sumner, Williamsport, Md.

*If you ever have any membership questions, please contact
Will Stewart, Membership Chair, at membership@candocanal.org.*

This issue of *Along the Towpath* includes the membership renewal form. You can complete that form and mail it in, or renew on-line at www.candocanal.org/membership.html. Please renew on time to continue to receive *Along the Towpath* without interruption.

The History

Lock 3. Constructed by the Canal Company between 1829 and 1831, Lock 3 is over 90 feet long and was built from Aquia Creek Sandstone. Repairs completed on the lock in 1980 held up well until the structural problem of the walls was discovered in 2004. From 2004 until 2011, various studies were conducted to confirm that the lock walls were actively leaning inward.

Since 2004, the walls moved an average of 1/6 of an inch to one-quarter of an inch every year, resulting in 1 to 1.5 inches over the course of seven years. The lock was designed to be 15 feet in width, to allow for a boat to lock through with 3 inches to spare on either side. However, when measured at their worst case location, the walls were 1-foot-10-inches narrower at the top and 6 inches narrower at the bottom.

With such a drastic change in width and the active signs of continual wall movement, the replica canal boat could no longer safely fit into the lock. The missing historic timber floor of Lock 3 and the deterioration of the timber foundation are believed to have caused the structure's damages.

Lock 4. Completed under the same contract and time period as Lock 3, Lock 4 is also over 90 feet long and was made from similar materials as Lock 3. While not as structurally unsound

as Lock 3, Lock 4 faced deteriorating mortar joints and lock gates as well as damaged portions of its walls. Repairs were needed in order to preserve the structure and to obtain water tightness. Unlike Lock 3, Lock 4 has a foundation of bedrock, increasing stability of the lock walls.

The original stone for both locks was sandstone, locally sourced from Aquia Creek in Stafford County, Virginia, around 40 miles away. Some repairs were made using granite veneer, bricks or concrete. As an expedient source of material,

some stone from the excavation of the canal was also used. A water-powered stone cutting mill was most likely used to hew the stones, although it has not been confirmed.

The Project

The \$7+ million project to repair the deficiencies of Locks 3 and 4 was awarded to Clark Construction in late 2016. The goals of the project included repairing primary park resources, restoring operations of the

interpretive canal program, correcting the visitor and public safety threat, and protecting adjacent private property. Both locks needed functioning gates and various repairs in order to allow for boat operations and to assist in flood risk reduction

Lock 3. Due to the extreme deterioration of Lock 3, a number of alternative repair options were considered. A few of these included stabilizing the structure in-place, reconstructing the structure, and constructing reinforced concrete



A 2019 view of Lock 4 after repairs – Photo by Stephanie Spencer



A 1970s view of the Lock 3 area and a canal boat – Photo C&O Canal NHP, National Park Service



A 2010 view of the drained Lock 3 area – Photo C&O Canal NHP, National Park Service



A 2019 view of the repaired and rewatered Lock 3 area – Photo by Stephanie Spencer

retaining walls. Alternative number two, reconstructing the structure, was chosen due to its potential of having the longest term stabilization solution.

This alternative also provided the greatest level of stability against adjacent property loss and public safety, and it permitted the full use of the lock for interpretive programs during and after construction. The full reconstruction option used a new, reinforced concrete foundation and as much of the existing stone as possible.

During the project, Lock 3 was taken down to its historic foundation, which hasn't been seen for over 188 years, according to Joe Reed, the park's civil engineer. The historic timbers in the foundation were replaced with concrete in order to increase stability and inhibit future wall movement. To reach the foundation, the contractor had to remove the stones by crane and preserve as many of them as possible.

Each stone was numbered, measured, cleaned and cataloged. During construction, passersby would have seen piles of pallets filled with stones, all lying where the completed Lock 3 now stands. They also would have seen large wooden gates sliding into place at the end of 2018. These gates were constructed from



*Top – The exposed timber foundation of Lock 3
Middle – Pallets of cataloged stones from Lock 3
Bottom – Removal of the deteriorating gates at Lock 4
Photos by Joe Reed, C&O Canal NHP Civil Engineer*

southern yellow pine timbers and replaced the prior deteriorating gates.

Lock 4. While not as extensive as Lock 3, the repairs on Lock 4 touched major areas of the lock in order to restore stability. The mortar joints along the stone walls were repaired and replaced, and local portions of the stone walls were reconstructed due to deteriorating conditions. Some of the stones were restored via Dutchman repairs, which is a technique used to replace small sections of a damaged area.

Any new stones used for repairs on both locks were acquired from a quarry in western Pennsylvania, which is over 200 miles northwest of the project location. The stones were sourced from “roaring run,” a rock vein with similar qualities to the original stones, and they were drilled and cut to the correct sizes. Lock 4 also received gate replacements for all four gates, each of which was constructed from southern yellow pine timbers.

The Rewatering Process

Currently, both Lock 3 and Lock 4 are ready for interpretive use and have water flowing through their newly constructed gates. While it may seem the watering and dewatering of the canal happens easily, there is a complex process behind it. For the lower 5 miles of the canal, the



A 360 degree view of Lock 3 during construction – Photo by Joe Reed

process begins at Inlet Lock 1 (Mile 5). With the help of what remains of Dam 1 (Mile 5.6), the Inlet Lock 1 guard dike, an earthen berm running parallel to the river, is able to direct water from the Potomac River to the lock. When the paddles on the lock gates are open, water from the river flows through and into the canal.

The water then makes its way down the next 4.5 miles of the canal until it reaches Lock 4. Paddles on the lock gates are open to allow water to flow to Lock 3, where water flows through and down to Locks 2 and 1, where the lock gates are open or non-existent. This allows water to flow back into the river through Rock Creek and past the Tide Lock at Mile 0.

Park staff control the water levels by opening and closing the paddles on the lock gates and on waste weirs, which drain excess water back into the river. Weather also impacts water levels, and sometimes debris can pile in front of the gates of Inlet Lock 1. Flash floods and high water happen frequently, causing canal levels to change.

The Outcome

As water flows through the completed Locks 3 and 4, there are current efforts to better the Georgetown area. There is an ongoing project in the area just above Lock 4, where the 31st Street Bridge crosses the canal. The District's Department of Transportation is working to replace the bridge, but the Department must ensure a portion of the water continues flowing through the canal to the newly restored Locks 3 and 4.

There is no longer a detour around the Locks 3 and 4 construction site. The project was completed in the summer

of 2019. The official ceremony, held on September 12th, was open to the public and included music, food, children's games, interpretive discussions, and the official opening of Locks 3 and 4. As water rushed through the open paddles of the Lock 3 gates, people gazed in awe at how far the area has come since 2016.

In 2016, foundations were failing, gates were deteriorating, and walls were caving in. In 2017, Lock 3 was just mountains of pallets full of stones. In 2019, Lock 3 is fully rebuilt, and Lock 4 is repaired and stabilized. Both locks have water flowing through their newly constructed gates, awaiting the arrival of the new Georgetown canal boat. The boat is expected to return in 2020, along with the mules.

The Georgetown section of the canal is used as a work commuting route, a nature-haven, a kayaker's paradise and historical center. Without attention and repairs, these qualities would disappear. The area would lose pieces of itself and would lose its history. Now that Lock 3 is rebuilt and Lock 4 is repaired, these historic structures will be around for years to come. Generation after generation will walk the brick towpath, gazing in wonder and yearning to learn more about these awe-inspiring stone structures. They'll visit a visitor center, purchase a book, or search online to learn more—and the rest is (or will be) history.



Above – A 2019 view of water flowing through the new gates of Lock 4

Below – The celebratory ceremony on September 12, 2019 officially opened Locks 3 and 4. Participants included (l-r) Jennifer Romm, Chair of the Georgetown Heritage Board of Directors; Jeffery Nichols, Georgetown Heritage Executive Director; Kevin Brandt, Prior C&O Canal NHP Superintendent; Andrew Trueblood, D.C. Office of Planning Director; and Joe Sternlieb, Georgetown Business Improvement District CEO.

Photos by Stephanie Spencer



Stephanie Spencer is a professional photographer and journalist from Pennsylvania who graduated from the University of Maryland University College. She currently works at the C&O Canal National Historical Park headquarters as the Maintenance Division's Facility Services Assistant.

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 (106–43 BCE), *Pro Publio Sestio***

The Canal Company's Financial Crisis 1838–1842

In the 110-year history of the Chesapeake and Ohio Canal Company (1828–1938), there were multiple times when it would have been entirely understandable had the company gone out of existence and liquidated its property. It must surely be one of the most surprising aspects of the company's history that it survived (1) its troubled construction era and through the first third of the 20th century (to 1938); (2) nearly half a century under the oversight of a bankruptcy court (1890–1938); and even (3) for 14 years (1924–1938) under an order to maintain the canal so that it could be quickly reopened if needed after the last season of official navigation on the canal (1923).

Each of the company's crises reveals the complexity of the canal's place in the region's transportation network and its political, economic and legal connections. At no point are the reasons for a crisis or its survival simple (although often viewed so). Rather, there are multiple primary and secondary causes and diverse forces that can be documented from historic sources.

In some ways, the most interesting of the crises is the one that took place in the middle of the canal's construction era (1828–1850) and came to its head in 1841 and 1842. It occurred as all but the last 50 miles had come into service and use of the canal was increasing every year—this during an era before coal became its major cargo. For example, between 1831, when the first section opened from Inlet No. 2 downstream, through 1839, when 139 miles were open, the income from tolls increased from nearly \$33,000 to over \$47,000.¹

However, during these years, in addition to the widely diverse ascending and descending cargoes, large shipments of coal did occur. An example was reported in the Washington, D.C. paper, the *Daily Madisonian*, reprinted from the *Georgetown Advocate* April 2, 1842:

A foretaste of what is to be enjoyed by us on the completion of the Chesapeake and Ohio Canal to the coal region at Cumberland, has been administrated this week by the arrival hither of a fleet of boats, laden with the

black diamonds of the Alleghany. Fifteen boats freighted over 17,000 bushels of coal, are already arrived, and there are many more to follow. This coal we understand to have been contracted for by the Government, and pressure for the service of the United States' war steamers, the Missouri and Mississippi, which vessel are under orders for Washington.

The 17,000 bushels equaled 680 tons and, when carried by 15 boats, represented an average of 45 tons per boat. The significance of that number is seen only when one remembers that it would be nearly a decade before boatyards in Cumberland would be building what became the standard C&O Canal freight boat that could carry up to 130 tons (but typically carried 110 to 120 tons). These 15 boats would have been narrow and their draft shallow enough to pass over the rocky sections of the Potomac between Cumberland and the inlet lock at Dam 6. Indeed, another paragraph of the April 2, 1842 article speaks to the importance of the river's condition so these boats would be able to navigate it with substantial cargo:

We ought perhaps to state that we are indebted for this arrival to the high-water mark in the Potomac between Cumberland and the head of the Canal [at Dam 6], whereby the rapids of the river were comparatively obliterated.

However, while use of the opened sections of the canal was increasing and represented the operating side of the canal company's activities, the other side—construction of new sections—was slipping into an ever more unsustainable situation. That story is documented primarily in canal company, state and federal reports as well as official communications between these various parties. Our acquisition and easy access to more and more of these materials is due in no small extent to the work of volunteer Dward Moore, who spent 80 hours in 2018 and 2019 searching the internet for and transcribing documents of this kind into Microsoft Word files that are easy to organize, access and use. Such work is immeasurably valuable and assures that as historical C&O Canal material comes online on various library and archival sites, it is captured and provided to the park and other historians working on the canal's history.

For five years from June 1834 to June 1839, George Corbin Washington (1789–1854), a grand-nephew of President George Washington, was the 3rd president of the C&O Canal Company. He followed Charles Fenton Mercer's five years (1828–1833) and the single year presidency (June 1833–June 1834) of John Eaton—the scandal-rocked

friend of Andrew Jackson whose election to the canal company position was essentially a political effort to gain Jackson's favor (which didn't work).

In a special session in May–June 1836 the Maryland legislature passed what became known as the “Eight Million Dollar Bill” that provided for subscriptions to Maryland bonds intended to aid five companies. Of that \$8 million, \$3 million was designated for the C&O Canal and another \$3 million for B&O Railroad. However, as Walter S. Sanderlin writes in his largely administrative history of the canal (*The Great National Project*), these bonds “involved the company in a tangled and increasingly precarious financial situation.”² The trouble began with a delay until March 1838 in the state's confirmation of the bond issuance, and then the failure of the bonds to sell due to the bank panic of 1837 and the deep national recession it brought on that would last into the mid-1840s.



Canal script – Images courtesy of the C&O Canal National Historical Park, National Park Service

The result was that, by the winter of 1838–39, the Canal Company was desperately petitioning the state for immediate monetary help. In a March 13, 1839 a report from the House of Delegates Ways and Means Committee to the Maryland legislature, made two propositions:

1st. Either to provide during the present session of the Legislature, pecuniary aid to such an amount as will secure the most vigorous prosecution of this mighty enterprise to its accomplishment which will cost, according to the last revised estimates, nearly three million of dollars;

or 2d. to [A] suspend all further appropriation of money on the part of the state until the General Government

and the cities of Washington, Georgetown and Alexandria will have surrendered their entire interest in this work to the state of Maryland [B] on condition that this work shall be extended to Cumberland by this State with all expedition.

The committee recommended the 2nd proposition—a decision that denied the canal company a direct path to funds much needed to continue construction.

Critical to Maryland's relationship to the canal is the fact that in 1828 Congress committed to the purchase of \$1 million in C&O Canal Company stock, and authorized the City of Washington to purchase another \$1 million and the federal district cities of Georgetown and Alexandria to purchase stock worth \$250,000 each. By the late 1830s, the canal company held \$218,750 in Washington and Georgetown bonds that the cities had issued to finance the stock purchases and that were unmarketable at that time. Also, by 1834 some \$250,000 was due from delinquent stockholders with no indication that any of those commitments would ever be paid. Yet, these would be treated as soft assets of indeterminate value.

The March 1839 Maryland Ways and Means report to the state legislature went on to emphasize that:

The state of Maryland had already subscribed \$625,000 capital stock in the canal [and] a further appropriation of two millions of dollars as a loan was made on the part of the State, which sum, according to the estimates then presented by *this company* [i.e., the canal company—the emphasis in the original] to the General Assembly of Maryland, was adequate to complete the canal to Cumberland.

Their comment here begs an explanation for the continuing increases in the costs of construction and in predicted costs for completing the canal to Cumberland. Sanderlin provides an excellent review of the cause for the increases naming (1) epidemics and labor unrest; (2) the board's insistence on high quality masonry structures; (3) the failure to find good stone in the upper valley; (4) dramatic increases in the cost of land, labor and supplies; and (5) the high cost of the Paw Paw tunnel route (although it's not clear that the alternatives would have been significantly less expensive).³

The report to the legislature continued:

On this great work which is emphatically a “district work” this State has already invested \$5,625,000. If this great enterprise be not completed to the coal regions near to Cumberland, this investment of \$2,500,000 must be to them [i.e., the federal government and DC cities] altogether unproductive and is it not, therefore, both reasonable and just if this State advance \$3,000,000

more in the execution of an object equally beneficial to them, that they should surrender to the State the interest they now possess?

The Committee's report then detailed the canal company's debts, which were in excess of \$2 million. The report stated that after those debts were paid from the \$3 million assistance in bonds finally issued the year before [bonds that, we note, weren't selling!], \$1,160,000 would remain. The committee stated that they considered that amount sufficient to keep construction going until the negotiations with the federal government and district cities concluded with their surrender of their entire interest in the canal to Maryland. The surrender proposal was justified by the condition that *Maryland would complete the work to Cumberland with all convenient dispatch* if the claims were released. The report recognized that more assistance from the state would then be necessary to fulfill that condition—estimating another \$3 million.

It should be noted that canal company actions in 1837 and 1838 had muddled the water that Maryland's Ways and Means Committee attempted to clarify in their report on the company's fiscal condition. This was a factor in the attempt to get loans on the pledge of Washington and Georgetown bonds, until the Bank of the United States⁴ in Philadelphia granted a loan of \$50,000 on the pledge of Washington City stock. Of course, if the federal claims were released, those bonds would become even less marketable and likely cease to have any real value at all.

The legislature ultimately accepted the committee's recommendation with the result that until 1845 Maryland's withholding of further support persisted as the negotiations with the federal government and district cities for the surrender of their claims took place. Eventually that effort would be completed successfully but debates concerning the canal and the Maryland's financial involvement with it continued to be a major issue before the state's legislature during those years.

The canal company, however, had renewed the issuance of canal script in the summer of 1837. (Previously monetary script had been issued during the canal company's financial difficulty in 1834, backed by a trust fund of \$150,000 in bonds to redeem the notes when presented for payment.) The initial issuance in 1837 was due to a shortage in coins and currency and involved only notes of less than \$5 value. However, the company rapidly began to issue notes in \$5, \$10 and even \$20 denominations. This continued until, by the end of May, 1838, \$376,513.50 had been issued in canal notes. However,

the Ways and Means Committee March 1839 report listed only \$135,000 worth of circulating notes, which suggests that \$241,513 of the script notes had been redeemed, clearing the debt that they represented. It seems unlikely, however, that this was actually the case.

The canal company board considered the issuance of script to be a stopgap measure while efforts were being made in England to sell the bonds from the \$3 million bond act passed in 1836 (but not finalized until the issuance of the bond certificates in 1838). When the bonds did not sell, the

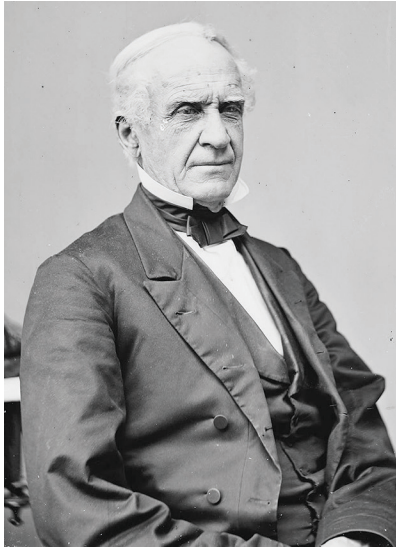
company began to take out loans on the pledge of those bonds in what Sanderlin calls a "frenzy of hypothecation without effective safeguards" (i.e., securing the loans with the bonds as collateral at rates below their face value). Eventually those loans amounted to \$2,368,925.⁵

This was enough to undermine Maryland's credit ratings, which led the assembly to investigate the conduct of the canal's affairs and to general condemnation of the directors' practices. The political fallout contributed to the election of William Grason, a Democrat, as governor (in the first direct gubernatorial election in the state's history).

Grason assumed the office in January 1839 and was able to remove the Whig canal board and appoint Democratic officials in their place in the annual June stockholders meeting. The new board was forced to liquidate its enormous debt while also continuing construction. For two months the new company president, Francis Thomas, sold \$4,064,444 in bonds at a rate one quarter less than par value, amounting to a loss of \$1,048,022. He did this largely operating alone without the quorum of the board supporting him. His management, while reducing the company's debt, left even other Democrats criticizing Thomas's actions.

Then, on Sept. 13, 1839, another \$300,000 was issued in canal script to avoid abandoning construction. The board established a trust fund of 5 percent of the Maryland bonds to redeem the script that was being accepted back from people who had been paid with it and then used it to pay tolls and rents, etc., due to the canal company. In April 1840 the board suspended the issuance of script but then, in June 1840 the board authorized the printing of script as needed to pay the estimates of work done. This resulted in a decade-long legal controversy. Ultimately 80 percent of this latter issue was never redeemed, likely because the company could not or would not provide script owners real money for those canal notes.

(Continued on next page)



Francis Thomas

The VIP Program is Winding Down for 2019

By Jim Heins

The VIP program didn't go from 0-60 in 20 seconds, but it did go from a very sluggish start to full throttle by year's end. The results are very gratifying.

This year, your VIPs have:

- Installed 14 new benches and reinstalled two benches that had to be removed by Maintenance,
- Installed picnic tables at Fletchers Cove and at the Monocacy Aqueduct,
- Spent four work days cutting boards, priming and painting them and building picnic tables,
- Been involved in the cleanup at Swains Lock on four occasions along with the Stewards at Swains,
- Worked with a number of volunteers dealing with the removal of Garlic Mustard,
- Held a cleanup and vegetation removal at Riley's Lock,

- Installed a new Midpoint milepost at MP 92.25,
- With the cooperation of 11 members, cleaned and waxed 175 waysides in the park (see separate article).

Much of this effort required significant travel time and physical stamina. We owe a great thank you to the 10 members of the bench bunch, the 11 members of the wayside cleaning crew and the members of the Canal Stewards at the Swains Lock area.

Your Association was on display, seen by many visitors along the towpath and was thanked by many as they passed by or chatted with us. We are already developing an agenda for 2020 and would be happy to welcome others into the fold.

Congratulations to all who helped make this another productive year in support of our park. **VIPs – Very Important People Volunteering In the Park** working on **Very Important Projects**.

Accompanied by the Past (Continued from previous page)

When long term, highly reliable officials of the company opposed the unrestricted use of script, many were dismissed or voluntarily retired, including but not limited to the clerk, treasurer, chief engineer Charles B. Fisk and several divisional superintendents. A number of these people took their concerns and views to the newspapers in January 1841, which led to a new legislature's demand for an explanation from the board for their use of script and for the turnover of major staff and other employees. However, in March the Assembly adjourned without responding to the canal company's growing insolvency.

In April 1841 Maryland—by then the controlling stockholder—ousted the old board and installed a new one with Michael C. Sprigg replacing Thomas as president. He and the new board reinstated many of those who had left or had been let go the previous summer and fall (including Fisk). It also proceeded to reform canal affairs, forbidding the issuance of script, and first ordering 1/3rd of tolls to be received in current money (not script) and then requiring full payment in cash. The new directors agreed to accept drafts from contractors who were willing to continue until monetary aid became available, but the situation unsurprisingly resulted in the end of construction by December 1842.

However, there was one further episode of audacious canal company official activity after William Gibbs McNeill—an ex-major in the U.S. Topographical Engineer Corps who

had worked on the 1833 survey for the C&O Canal—was elected president because it was believed he could secure out-of-state capital for the canal's completion. McNeill took office on April 12, 1843, however. Subsequently, when the contracting firm of Letson and Rutter and other contractors submitted proposals for completing the canal, the board rejected them. McNeill then seized the official company seal and executed a contract with Letson and Rutter without board approval. The board, however, subsequently annulled the contract and in August the state removed McNeill. James M. Coale, one of the directors, was chosen as his successor.

From 1842 to 1847, no construction of any consequence took place. The story of the legislative battle for additional Maryland support and of the troubled 1847–1850 final era of fitful construction will be told in my column in the June issue of *Along the Towpath*.

Notes:

1. Sanderlin, Walter S. *The Great National Project*, p. 306.
2. Ibid, p. 129. Further details of the financial situation provided here are also from this source. See especially the last part of chapter V and Chapter VI from p. 128 to its end.
3. Ibid. pp. 115-127
4. The Second Bank of the United States had been given a 20-year charter in February 1816 which was not renewed at the end of January 1836 after which it became a private corporation until liquidated in 1841.
5. Sanderlin, op cit, p. 133.

Waysides – Stationary Rangers

By Jim Heins

With a decline in the number of rangers in the park, waysides have become a useful way of disseminating information. These stand-alone information panels have rapidly popped up throughout the park.

Some waysides are quite generic and copies can be found from Cumberland to Georgetown. Others are unique to a specific location or subject. There are, presently, more than 215 waysides in our park. Some, probably as old as the park itself, are now in pretty bad shape and hard to read. Others are much newer, but even some of those are in poor condition. Industry continues to seek materials that will fare better for this kind of use, sitting out in all kinds of weather. Many wayside are almost horizontal, allowing debris, droppings, and human abuse to speed their demise.

The C&O Canal Association has expressed a desire to help improve the visual quality of these waysides. This past summer, a crew of 11 stalwart volunteers (including spouses and other friends) agreed to clean, inspect and wax the surface of every wayside in the park as well as photograph each one. That part of the project has now been completed. This was a huge effort and done exceedingly well. Many of the waysides which were not readable have been brought back to life. The next step will be, working in concert with the park, to develop a procedure for replacing some of the worst wayside panels.

Many thanks to those who got us to this point – Jim Bisasco, Mike Bucci, Mike Cianciosi, Ben Helwig, Dave Long, Rod Mackler, Skip Magee, Craig Roberts, Jim Tomlin, Jon Wolz and myself.



An example of a more radical improvement due to cleaning; left, before and right, after. Before photo by Pete Peterson and after photo by Mike Cianciosi

Some of the VIP "Bench Bunch" take a well-deserved break at Taylors Landing after another completed installation. Standing (l-r): Doug Zveare, Tom Lightfoot and Rod Mackler. Seated (l-r): Linda Lightfoot, Jim Heins and Craig Roberts. Photo by Doug Zveare.





Milepost Painting Project

By Jim Tomlin



Two Association members, Meredith Matczak and myself, working under the direction of C&O Canal NHP Volunteer Coordinator Emily Hewitt, have begun a project to repaint all of the C&O Canal mileposts. Mike Bucci has teamed up with us to lend his artistic flair to the project. We

and thorough sweeping off of all dust. Then a coat of National Park Service brown paint is applied, and when the paint has dried, a careful re-lettering of the mile number and framing “smiles” using white paint. The work is time-consuming; one person can prep and repaint about 5-6 mileposts on a long day.

feel that it is important to always be thinking of ways to assist and beautify the park. You may have already noticed some of the repainted mileposts, and wondered who was doing the work.

I co-oversee the 3-mile section of the 2,100-mile Appalachian Trail on the towpath (Weverton to Harpers Ferry) for the Potomac Appalachian Trail Club, as well the 7-mile section of the 250-mile Tuscarora Trail on the towpath (Hancock to Licking Creek). As part of those duties, I was faced with repainting several mileposts that had been spray-painted by vandals. The thought emerged “Why not repaint ALL of them?”

Repainting the canal's mileposts involves tedious scraping of all of the old loose paint, sanding, wire brushing



Meredith Matczak works on Milepost 40 – Photos by Jim Tomlin

It is very interesting that the lowest paint layer is a dark green. On my first thru-ride of the canal in 1971, I noted that the mileposts were dark green at that time. Most of the mileposts repainted so far have this dark green layer, which indicates that most have been in place for a very long time.

Mileposts 1 through 73 have been completed since the start of the project. The small but effective team will take the winter off and resume in the spring. It would be very helpful to have a few more volunteers to help the repainting teams when they return in the spring.

If you would like to volunteer to help or want to find out more information about this project, contact me at jftomlin@gmail.com

Across the Berm – Paul Hauck

By Steve Dean

Paul Hauck died on July 1, 2019 in Naples Fla. He was one of the original Douglas Hike participants in 1954, and a founding member of the C&O Canal Association. He was the Association's president in 1966 and also served on the board in other roles in later years.

Mr. Hauck was a frequent participant in Association events, a contributor to *Along the Towpath* and an active Association volunteer. As a volunteer, he was a long-time Level Walker on Level 39 and a frequent participant in the Association's Volunteers-in-Parks (VIP) program.

Joan Paull was the VIP program chair when Paul Hauck served as a volunteer. She recalled that he frequently participated, and was a hard worker. He shared many wonderful C&O Canal stories when the VIPs would take a work break.

Mr. Hauck was one of the original attendees of the Association's President's Day breakfasts. At the second breakfast, he remarked that “The success of the Association, I recognize, is due to the hundreds of volunteers – officers, committee chairmen, level walkers, newsletter editors, volunteers of all kinds, many of them in the room right now – whose efforts have made it the spirited and influential organization it is today.” Paul Hauck's vision as one of the founding members of the Association certainly led to the success that the organization has achieved.

Mr. Hauck was born in 1920 and was originally from Brooklyn, N.Y. He served in the U.S. Navy during World War II and after the war in the Naval Reserves. He had an active civilian career in the intelligence field with both the Navy and the Air Force.

On the Level

As is evident by this report of walks through November 15th, our Level Walker volunteers were very busy this fall. If you are interested in learning more about the Level Walker program, contact me at levelwalker@candocanal.org. – Steve Dean, Level Walker Chair

Level 2 Incline Plane to Lock 5: Rod Mackler reports Sept. 6: The canal was mostly watered. There was a lot of vegetation in the canal prism, especially cattails. There was one large tree that had fallen across the towpath and canal prism. Park maintenance had quickly removed the part of the tree that had blocked the towpath. There were lots of dragonflies and butterflies, but no birds or turtles. There were large numbers of walnuts. Despite the numerous Paw Paw trees there was little fruit. I met a pair of bikers from Warsaw, Indiana who were biking from Pittsburgh to Washington, and another biker from Canada who had biked all the way from Montreal over the past two months.

Level 5 Lock 14 to Bridge at Cropley: John N and Frances M Maclean report Oct. 13: There were hordes of hikers on a Sunday. The towpath was remarkably clean, and we met a couple of guys coming west to east who had a bag of trash they'd collected. We saw a beaver motoring along in the second turning spot west of Carderock. One heron, lots of ducks including two families of woody ducks, who stayed on the far side of the wide turning area. The mallards don't mind people so much. They were in the marshes right up against the towpath.

Level 7 Great Falls Tavern to Lock 21: Nancy Benco reports May 21: Towpath conditions were good. There are several downed trees in the prism along this level—some falls are one or two years old. Water seems to be moving but some incoming water from the east is creating mud flats, located within a mile of Great Falls. Many Paw Paw fruits have fallen on the towpath along this level, making walking or bicycling a bit hazardous; the pulp is slippery. Blue-stemmed goldenrod is growing along the canal prism. Japanese stilt grass is thriving along the prism bank of this level. **Jim and Lisa Goheen report Oct. 30:** The towpath was in decent shape, with no trees blocking path. There was still some debris in the canal blocking water flow. There was a red fox at the visitors center and another one at Mile 16.

Level 9 Lock 22 (Pennyfield) to Seneca Aqueduct: Paul and Rita Marth report Sept. 17: We spotted herons and cormorants, and about 50 to 60 turtles. Most trash we found came from the river edge. The Seneca Aqueduct arches had large debris piles including tree trunks; one arch was clear. **Jon Wolz reports Nov. 4:** The towpath is in good condition with only a few tire ruts. I picked up numerous beer containers at the Violettes Lock picnic area. There is severe erosion near the foundation of the Pennyfield lockhouse. There is a plastic snow fence around the eroded area. The canal prism is full of water from Violettes Lock down to Pennyfield Lock. **Sylvia Diss reports Nov. 6:** There was mostly light trash, but tires were visible along the river at near Violettes Lock. An additional picnic table in the Violettes Lock area would be beneficial, as it gets a lot of visitation.

Level 12 Sycamore Landing to Edwards Ferry: Ray Abercrombie, Larry Broadwell, Pat Hopson, Tom and Linda Lightfoot, and Frank Wodarczyk report Sept. 7: There was much less trash than usual at both the Sycamore Landing and Edwards Ferry parking lots, as well as at the hiker-biker camp. Someone else must be cleaning up the Sycamore Landing lot periodically. Most of our trash came from the Goose Creek Lock area; as usual, fisher-people leave a lot of junk. Edwards Ferry had been recently mowed; and we're always relieved to see that the lockhouse and the Jarboe store ruins were

unscathed and in good shape. The towpath is in good shape all along this level. We removed lots of branches from the towpath. Alas, the Japanese stilt grass has taken over this level (and many others).

Level 15 Whites Ferry to Lock 26: Jon Wolz and Steve Hovarth report Sept. 10 and Nov. 1: The entire length of the towpath on this level is in very good condition. It is in better condition than it was in 2018. The prism was very dry in several spots; in 2018 it had water the entire length. In September I cleaned and painted the picnic table at the Marble Quarry Hiker-Biker camp. The grill still needs repairing and is held up with one stone. There were many Paw Paw fruits on the ground and their fragrance was noticeable along the towpath as we walked. In November there were numerous small to medium tree limbs I cleared from the towpath. The towpath had been resurfaced on this level. It felt soft as I walked from Dickerson to Milepost 38. From that point down to White's Ferry, the towpath was hard and had been packed down. There was a very large tree limb that had recently fallen from the Lock 26 giant silver maple tree. The limb was from an outer "Y" of the tree and not from the main trunk.

Level 16 Lock 26 to Monocacy Aqueduct: Jon Wolz and Steve Hovarth report Aug. 27 and Oct. 11: The towpath continues to be in very good condition on this level. In August the water in the prism from Dickerson to Lock 27 was low. The gutters of the Lock 27 house are full and need to be cleaned out. The gutters in the front are pulling away from the house. This has been an ongoing issue. In August the Monocacy River level was low and mud bars were visible. In October the contractors were starting to work on the towpath resurfacing on the lower part of the level. **Mike Cianciosi reports Oct. 19:** This level walk marks 20 years of walking on this level. The towpath was almost trash-free. The trash I picked up was mostly off the path and around the Monocacy parking lot. The logjam in front of the Monocacy aqueduct was smaller, but still there. The Monocacy water level was extremely low, and there was a large island of land just downstream from the aqueduct.

Level 17 Monocacy Aqueduct to Nolands Ferry: Earl Porter reports Aug. 20 and Sept. 24: In August the towpath was in good condition, but a large amount of tree debris was down from an earlier storm. The Monocacy area was down to one picnic table and it was damaged. In September leaf cover was present on the towpath as the leaves started to fall. The Volunteers-in-Parks "bench bunch" was on-site building new picnic tables to replace the missing and damaged tables.

Level 19 Point of Rocks to Catocin Aqueduct: James Spangenberg reports Aug. 24: I collected two bags of trash, most of it out of the prism, from Point of Rocks to Lander. This is more than I usually collect. The NPS has cut and trimmed the trees along the towpath beyond Mile 49. **June Miller and Cathy Guzauskas report Aug. 28:** It was a nice morning for a calm, quiet stroll on Level 19. The level was very clean, and we noted that the NPS has been busy with tree clean-up. Wildlife was abundant, with cardinals, mourning doves, Carolina wren, squirrels, cicadas, millipedes, dragonflies and swallowtail butterflies. **Karlen Keto and Don Peterson report Sept. 23:** There was no trash to pick up on this walk. Visitation was light and no issues were reported.

Level 20 Catoctin Aqueduct to Lock 30: Doug Zveare reports Oct. 11: Vehicle speed on the shared part of the towpath in Brunswick is a concern. Stronger worded speed limit signs are needed. The temporary bypass across Little Catoctin Creek at the site of fallen Culvert 82 in good shape. There is a steep grade on each side of the bridge paved with gravel, making it precarious for cyclists. Signage recommends riders dismount and walk but is largely ignored. One cyclist nearly wiped out right while I stood there. Larger, more strongly worded DISMOUNT signs are needed on each end of the breach bypass detour. The Volunteers-in-Parks installed a bench on Oct. 12, 2018 at the Catoctin Aqueduct viewing area. While visiting this area I noticed that the bench appears to be in the same area where it was installed but it has been pulled up out of the ground, concrete footings still attached to the legs. Jim Heins was informed of this and is contacting the NPS to see if they know anything about it. The Catoctin Creek Aqueduct was in good condition with only a small amount of debris on the upstream side. Catoctin Creek level was very low.

Levels 21 and 22 Lock 30 to Lock 33: Tom Crouch reports Aug. 30; Sept. 5, 12 and 19; Oct. 11, 18 and 25; Nov. 1 and 11: In August trash was extensive, and an effort was made to clean up the area for Labor Day weekend visitors. During the September walks the trash situation continued, although on the last walk there was less along the towpath and I was able to pick up more along the waterfront. I understand there is at least one other person cleaning up along this area. I reported a downed tree that was partially blocking the towpath in mid-September. In October a tree that was downed by a beaver was partially blocking the towpath, and there were lots of squirrels scurrying across the towpath with nuts in their mouths. In November winds had brought down numerous trees and branches, and they were removed by the November 11 walk.

Level 22 Lock 31 to Lock 33: Karlen Keto reports Oct. 29: It was another beautiful day to level walk, and I was joined by my dog Chessie. The towpath was in spectacular shape and was so welcoming clean! Chessie alerted me to a young deer crossing the towpath as well as several squirrels.

Levels 23 to 26 Lock 33 to Antietam Aqueduct: Tom Crouch reports Oct. 15: The day was perfect, sunny with temperatures in the mid-70's. During the course of this trip I encountered a large number of park users. The surface of the towpath is in excellent condition with no difficulties or hazards. The detour trail and wooden bridge over the Culvert 97 area remain in good condition. I paid special attention to the potential for trash at the various picnic areas, and found quite a bit at the Huckleberry Hill hiker-biker camp.

Level 23 Lock 33 to Dam 3: Arthur Tsien reports Aug. 29 and Nov. 2: The level was clean, and the towpath surface was in great condition. There was an equal number of walkers and bikers, plus several river users. Numerous large birds were on rocks in the river and may have been cormorants. In November there was a group of about 25 people near Dam 3 on organized, guided hike sponsored by Potomac Conservancy. A hike leader was addressing the group about history. The recently resurfaced towpath looked great; no puddling despite recent rains.

Level 25 Dargans Bend to Lock 37: John and Lynn DiCarlo report Aug. 15 & 16: The new surface was nice to walk on. Bikers were flying. Straw was down on both sides of the towpath.

Level 26 Lock 37 to Antietam Aqueduct: John and Lynn DiCarlo report July 15 & 26; Aug. 12 & 13; Sept. 4 & 13: Resurfacing is finished in this section, and has moved up to the next level. Crush-n-

Run and dust is down. In September many leaves had fallen already. Most were beside the new surface, having been pushed to either side by foot or bike travel on it. **Jack and Karen Forster report Sept. 8:** We found the least trash we've ever seen, possibly due to apparent resurfacing evident through the entire length of the level. Water level was very low. Culvert 100 had only small puddles in front of it.

Level 27 Antietam Aqueduct to Lock 38: John and Joyce LeFebure report Sept. 5: We encountered 35 middle school students, teachers, and chaperones and their bikes were loitering at the bridge to the campground. I talked with a teacher who said they were from Richmond, Va. The teacher was originally from Williamsport. He admitted being a "River Rat." The towpath from the aqueduct to Packhorse Ford has been resurfaced, and from the ford to Lock 38 it has been graded and leveled in preparation for resurfacing. It is a great improvement. We only saw one Paw Paw tree that had fruits, but it was loaded with them. An ambitious beaver had gnawed at the base of a large walnut tree. **Ben, Jennifer, Holly and Zoe Helwig report Nov. 4:** It was a perfect day on the towpath. The resurfaced towpath looks good, but horses leave deep holes in it. The new towpath surface makes a towpath depression over Culvert 103 quite evident. There is graffiti at the Shepherdstown River Lock. There is a huge patch of bamboo just downstream of Millers Sawmill Road.

Levels 28 and 29 Lock 38 to Snyders Landing: Clifford Smith reports Sept. 21: Towpath conditions were good. At Lock 38 the area was resurfaced, but only with fine powder. I assume that a layer of gravel will be rolled into this powder, which has been done from Lock 38 downstream. Road surfacing machinery was parked along the towpath at Lock 38. I trimmed a few bushes and foliage that was overhanging the towpath. There were numerous walnuts disintegrating on the towpath, many of which are covered with leaves. This can be a little risky if you step on one.

Level 30 Snyders Landing to Lock 40: Charles Connolly reports Sept. 28: The towpath was resurfaced along the level, but it was showing signs of disturbance. The towpath was clean, but there was trash at Snyders Landing.

Level 31 Lock 40 to Marsh Run Culvert: Elaine Stonebraker reports Sept. 6: There was quite a bit of post-Labor Day weekend trash, especially around Taylors Landing. Lock 40 and the Horseshoe Bend Hiker-Biker camp were quite overgrown. The weather was gorgeous, making for a nice day on the towpath.

Level 32 Marsh Run Culvert to Dam 4: David Plume reports Aug. 19: This is the first time I walked my level without my dog Tip; he died recently of a sudden illness. Large items in the canal reported on my last level walk have been removed. The picnic table in the river from my last report is still there, but is inaccessible. Water was flowing from the Dam 4 cave and filled the canal prism for a hundred yards or so with several inches of water. There was no water flowing over Dam 4. It was bypassed for inspection.

Level 34 McMabons Mill to Opequon Junction: Trent Carbaugh reports Sept. 1: There was an extensive amount of trash at the McMabons Mill parking area. The towpath could have used some mowing but was in good shape overall. I cut back a few small tree limbs and some thorns. I saw some grey squirrels, and a large amount of coyote scat with a few tracks. The coyote sign is in the first section west from the Mill. With this being a confined area, it could be troublesome at some point, with nowhere for conflicting people and critters to get away from each other, especially in the late evening and after dark. I've been seeing more and more coyote presence in this area, which really doesn't make sense, but the evidence is there.

Level 37 Falling Waters to Lock 44: Jim Tomlin reports Aug. 24: The towpath surface was the best I have ever seen it. There was one 16-inch blowdown partially obstructing towpath at Mile 97.2. I was able to clear enough of it so cyclists could get by without carrying their bikes, but the rest was left for the NPS. I removed all other visible sticks and litter from Lock 44 to Falling Waters. There was surprisingly little litter, but it may have been hidden in the stilt grass. At 10 hours, this was a record level walk.

Level 42 Four Locks to McCoy's Ferry: Jack and Deb Ebersole report Sept. 6: It was a beautiful late summer day; we were surprised to see so little activity on the towpath. The towpath was in good shape. The picnic table at the North Mountain Hiker-Biker is in bad shape and should be repaired or replaced.

Level 45 Ernstville to Licking Creek Aqueduct: Dennis Kubicki reports Oct. 4: It was a great day to be on the towpath! The towpath was very clean from Fort Frederick through to the aqueduct. There was a significant amount of fallen leaves along the path that "carpeted" it. The towpath on my level continues to remain in relatively good condition after the resurfacing that occurred two years ago. Vegetation has recently been cut back along the sides of the path, in the areas of some of the culverts, and at the Licking Creek hiker-biker camp area. Two NPS employees who were in a pickup truck towing a trailer with a "bush hog" on it. They apparently were in the process of trimming the vegetation and also cut up a downed tree. Because of the weeks-long lack of rain, there was no standing water in the canal.

Level 46 Licking Creek Aqueduct to Little Pool: Andy Harbert reports Oct. 13: The towpath was clean. I could see that the Western Maryland Rail Trail was getting a lot of traffic. There appeared to be beaver activity near Milepost 118.

Level 47 Little Pool to Hancock: Mike and Judi Bucci report Oct. 23 and Nov. 6 (with Mark and Izzy Kovach): The new signs for the Tuscarora Trail are beautiful, and the trail well marked with blue blazes. Thanks to PATC and REI. The bench at Hancock along the towpath (Thanks VIPs!) that was placed below a black walnut tree is stained. During the October walk the leaves had not fallen, but by the November walk crunchy leaves were underfoot.

Levels 47 and 48 Little Pool to Round Top Cement Mill: Phillip M. Clemans reports Sept. 1: It was clear and sunny out, and a very busy day on the towpath and the Western Maryland Rail Trail. There were numerous hikers and bikers, and all picnic tables were in use. The towpath was firm, and the grass was under control. Repair work was in progress at the Round Top Cement Mill.

Level 49 Round Top Cement Mill to Lock 53: Paul Petkus reports Sept. 21 and Oct. 26 (with Sue Muller): Conditions observed in September reflected the lack of significant recent rain. There were no puddles on the towpath. There were no muddy stretches. Lock 53 only contained a small amount of water. The mitre structure at the bottom of the lock near the ingress was visible. Progress was evident for the Round Top Cement Mill preservation work. Birds observed included wood ducks, an American goldfinch and a green heron. Butterfly activity was low. In spite of that, I managed to see seven butterfly species. A flock of turkeys crossed the towpath during my walk. One of them decided to rest on the towpath. The other turkeys hung around in the grass, possibly foraging. I slowly moved closer to get better photos of the turkey on the towpath. Eventually I got close enough to cause it to get up and join the rest of the group. In October we identified flora and fauna. The presence of an American basswood tree was an unexpected sighting. The recent cool and

damp weather provided a good environment for tree fungus. Tree ear, chicken of the woods and Dryad's saddle were among the types seen. Wood ducks, pileated woodpeckers, cardinals, common mergansers, robins, cedar waxwings and white breasted nuthatches were seen.

Level 54 Lock 59 to Lock 60: Dennis Kubicki reports Aug. 31: It was great day for being on the towpath! The weather was perfect for a level walk. I encountered a hiker who was doing the entire Allegheny Passage. He began in Georgetown and was heading west. He was carrying all of his provisions and gear in a rectangular, two-wheeled, shopping cart. He had a back injury and was determined to complete the trip, so the cart was a solution to his needs. From Little Orleans to about Mile 145 the towpath was in generally good condition. From that point until Lock 60 I observed deep rutting and pits in many places and in some spots standing water of varying extent. No additional loss of integrity of the embankment at Culvert 207 was noted. The woods and understory along the path were still fully developed. I expected more fall-like conditions.

Level 55 Lock 60 to Culvert 208: Paul Petkus reports Oct. 5: The weather has been in an extended dry period for a couple of months. The water level in the prism was low. No puddles were present on the surface of the towpath. The streambed through Culvert 208 was dry. I was able to inspect the culvert and some of the fallen stones have washed downstream or been silted over. I encountered several bicyclists who appeared to be participating in the RiDE Allegheny organized bike ride. It was a four-day fundraising event in support of Operation Second Chance. Not many plants remained in bloom. Cricket frogs were frequently seen.

Levels 59 and 60 Tunnel Parking Area to Town Creek Aqueduct: Trent Carbaugh reports Sept. 8: It was a beautiful day with really no problems to report. I moved some sticks off the towpath and trimmed some minor thorns. There was very little trash; even the Paw Paw parking lot looked quite clean. There were a few large drying muddy puddles on the eastern end of Level 60. Repairs to the sinkholes look to be holding up with just a small amount of settling. All of the plant life was showing signs that fall was close, but all seemed happy, except for the multi-flora rose plants that were out for that last bit of human blood before winter shut them down.

Level 61 Town Creek Aqueduct to Lock 68: Trent Carbaugh reports Aug. 18: The towpath looked well. I trimmed a few weeds and thorn limbs. Deer were on the river side of the towpath, standing in their fields. There were few turtles in the canal. Fisher-people reported largemouth bass, sunfish, and chain pickerel in the canal.

Levels 65, 66 and 67 Spring Gap Recreational Area to Evitts Creek: Trent Carbaugh reports Sept. 22: All three levels looked good. The towpath was very dry, with lots of dust. Mowing had been done recently, and the worst of the grass and weeds were down. Though dry, the towpath was quite uneven with some deep potholes, the remains of the large puddles from earlier in the season. Both hiker/biker camps were in good shape and appear to have not been used much recently. I had a pleasant conversation whilst helping two thru-bikers change a tire; they were from Quebec and had started in Pittsburgh. They were absolutely thrilled with the C&O Canal. Weather was clear, mostly, with temperatures in the mid 80's, no breeze to speak of. Lots of birds, and more kamikaze squirrels than I could count. Saw one young garter snake, thought that I ran over him but managed not to, cute little fellow, and I saw a ring neck snake that unfortunately someone had run over. It is very hard to see the little guys in the leaves.

Delaware and Hudson Canal

By Rod Mackler

The Delaware and Hudson Canal stretches 108 miles, with 108 locks, across New York and Pennsylvania. Like the Chesapeake and Ohio Canal, its main cargo was coal. In the case of the D&H, the canal brought it from the mountain coal-fields at Carbondale, Pennsylvania, to sea level at Kingston, New York, on the Hudson River. From there the coal was transferred a hundred miles south to New York City.

The story of the D&H Canal began in 1812, when the Wurts brothers – William, Charles and Maurice – of Philadelphia tested the hard black anthracite coal of northeastern Pennsylvania and started buying up real estate in the area. They found it difficult to transport, however, using the natural streams and the Delaware River. They also recognized the value of getting the product to the New York market.

The construction of a canal was directly precipitated by two factors – the War of 1812 had cut off supplies of British coal to the East Coast, and the financial success of the Erie Canal fostered a desire to follow suit. New York and Pennsylvania authorized the canal in 1823 and construction began in 1825. It was finished relatively quickly, opening in 1828. The chief engineer was Benjamin Wright, who had earlier worked on the Erie Canal and later on the C&O Canal.

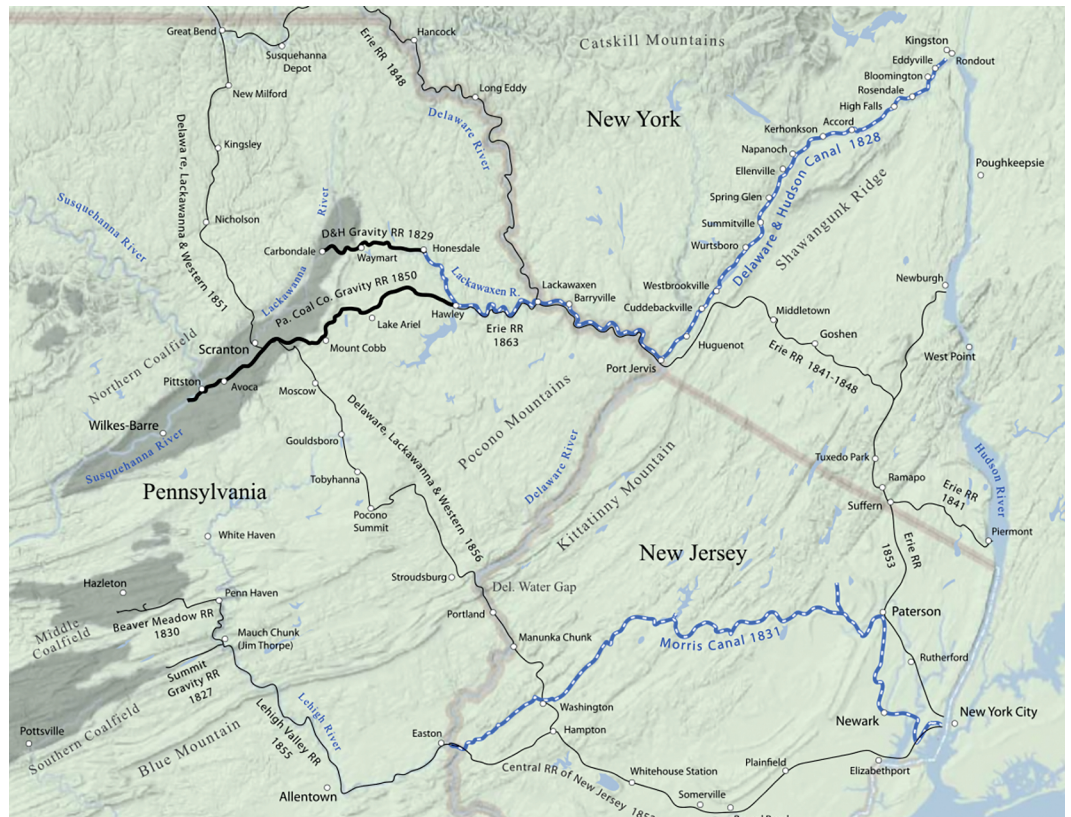
The D&H Canal had three distinct pieces. The first segment was a summit canal southwest from Kingston, following existing streams in the valley between the Catskill and the Shawangunk Ridge, to Port Jervis. The summit level is 17 miles long, between, appropriately enough, the

towns of Summitville and Wurtsboro. The second piece ran northwesterly along the New York shore of the Delaware River, crossing into Pennsylvania at Lackawaxen. The third leg was upstream along the Lackawaxen River to the anthracite fields of above Honesdale, Pennsylvania. A gravity railway brought the coal from the coal mine in the mountains to the canal on the Lackawaxen.



Above – D&H Canal Lock 50 – Photo by Rod Mackler

Below – Map of the D&H Canal – James R. Irwin, commons.wikimedia.org/wiki/File:D%26H-Canal.svg



The canal was initially 32 feet across at the top, 20 feet at the bottom and four feet deep. The locks were 10 feet wide and 76 feet long. The canal was financially successful, so it was enlarged in the 1840s and 1850s, to 6 feet deep, with locks 15 by 90 feet, close to the dimensions of the locks on the C&O. Mules were the prime source of power for the canal boats. At first the canal crossed four major rivers by slackwater dams. But during the period of expansion, the company hired John Roebling, who would later build the Brooklyn Bridge, to construct four suspension aqueducts. The trunks of three of the aqueducts have disappeared, but the one across the Delaware River was converted into a road bridge, still using the original cables, and one can walk or drive across it from New York to Pennsylvania.

The D&H is one of three canals built in the canal age to carry coal from the Pennsylvania fields to New York City. The other two were the Morris Canal and the Delaware & Raritan Canal, both of which crossed New Jersey from the Delaware River to New York harbor. The three canals fed the city's need to heat homes, fuel industry, and to feed the voracious appetites of steamships.

The D&H was profitable from the outset. Although it faced increasing competition from the railroads, the canal remained successful through the 1870s and 1880s. The Wurts brothers took an approach to the railroads different from the C&O's competition with the Baltimore & Ohio Railroad. The D&H Company developed its own railroad and, as the canal declined, it used the canal right-of-way for its rail beds. The bulk of the canal closed at the end of the 1898 season. A small segment (about 10 miles) continued to be used to transport cement from Rosendale to Kingston until 1904, when it too closed.

Parts of the towpath are now used for recreation. The counties maintain parks along the canal route and the National Park Service has added sites to the National Register



Above – Susan VanHaften at the abutment for the Roebling Aqueduct over the Neversink River

Below – Model of the Roebling Aqueduct in the D&H Canal Museum – Photos by Rod Mackler



of Historic Places. The Roebling Delaware Aqueduct, in particular, is a National Historic Landmark and National Civic Engineering Landmark, now owned and interpreted by the National Park Service. The D&H Canal Historical Society maintains an excellent museum in the picturesque town of High Falls, a few miles southwest of Kingston.

To summarize the key parallels with the C&O Canal, the D&H Canal:

- Was a product of the great canal age, after the success of the Erie Canal;
- Was a towpath canal, with barges pulled by mules;
- Had coal as its principle cargo, which the canal moved from the coalfields in the mountains to the tide water;
- Met its demise with the rise of the railroads;
- Retains a legacy that is of historic and recreational interest.

Nature Notes

By Marjorie Richman

An Unusual Survival Strategy

Small woodland plants have a problem. Because of their size they have a hard time competing for sunlight, and without sunlight they can't photosynthesize and produce the food they need for growth. Most of the year they are dwarfed by larger flowers and shrubs as well as the tree canopy that blocks sunlight from reaching the forest floor. This makes winter their time to thrive, which seems counterintuitive since everything appears dormant during this season. Or so it seems.

Actually, if you don't mind pushing aside leaf litter, there are plenty of green things to see on the forest floor in winter. The sight of green leaves tells us that these plants are using the unobstructed winter sunlight to photosynthesize and store up energy for their next blooming cycle. Their survival strategy is to take advantage of the lack of competition in winter to get as much sunshine as possible while everything else is sleeping. We don't think that plants are capable of planning ahead, but that's exactly what these small flowers are doing. When they subsequently bloom, they are able to attract pollinators and produce seeds for the next generation.

This strategy is also beneficial for us. Winter presents us with the opportunity to find out where these easily overlooked plants are located. Their green leaves are easily seen among the brown leaf litter when there's not a lot else competing for our attention. Once we spot their leaves, we will know where to find them again when the flowers are in bloom. The challenge is to be able to identify the plant from the leaves. That's the hard part.

There are many plants that follow this strategy in winter in anticipation of a future growing season, too many for this short article. Two plants that are quite common in our woods, but very much overlooked because of their small size, are striped (or spotted) wintergreen and the crane fly orchid.

The leaves of striped wintergreen (*Chimaphila maculata*) are pointed with a distinctive white stripe in the middle. They are jagged or toothed along the edges. There are usually 2 or more leaves growing close to the ground in winter. If the plant was pollinated, there may also be the remains of the flower stem at the

top. Come back in the summer, usually in June through August, to see the white or pink nodding flowers.

One egg shaped leaf of the crane fly orchid (*Tipularia discolor*) grows in the fall and remains visible through the winter. The upper side is green with purple spots, but turn it over. The most distinctive trait of the winter leaf is the deep purple color on the underside. The entire leaf withers in the spring. In the summer greenish purple flowers grow upwards along a spike with no apparent leaves, typically mid-July to late August. The asymmetrical shape of the flowers is unusual even by orchid family standards.

Once you start looking, you will be surprised by how many spots of green there are in the woods adjacent to the towpath and in our state and regional parks. In addition to the small plants, there are also hard-to-miss evergreen plants, such as laurel and holly, that stand out in a winter landscape. Holly, for example, bears fruit in winter, the distinctive red berries that are used for Christmas decoration. Once you get into the habit of looking for the color, green, in the winter forest, you might find that winter can be as interesting for plant identification as any other season of the year.



Above left – wintergreen with remains of flower stem; above right – underside of crane fly orchid leaf.
Below left – wintergreen leaves; below right – top side of crane fly orchid leaf. Photos by Marjorie Richman



Along the Towpath, December 2019

Big Slackwater Bird Walk

By Kurt Schwarz

The first annual Marion Robertson Memorial Bird Walk took place on September 8, 2019 at McMahon's Mill. Eight eager birders showed up, with a strong presence coming from West Virginia. We enjoyed pleasant temperatures, and mostly sunny skies.

I made a brief introduction and noted how Marion had instituted the nature walks. She readily accepted my offer to lead bird walks. Hopefully the memorial bird walk will become an annual tradition.

We trekked roughly 2 miles upstream along Big Slackwater to the point where the canal prism reappeared and past Milepost 89. We turned around at a boarded-up stone house and barn, which I cannot find in any of my guidebooks.

The birds were not abundant. We logged 29 species, which is not a good total during the height of migration. The steep banks and tall well-leaved trees made it difficult to identify very active warblers among the leaves. We only definitively identified two warbler species, magnolia warbler and American redstart. Water birds were absent and oddly there were no eagles or ospreys. We did enjoy at least two yellow-billed cuckoos.

Despite the low bird count, we all had an enjoyable time. Stay tuned for a spring walk, as well as another location for the fall Marion Robertson Memorial Bird Walk.



Above – Stone house at Big Slackwater. Photo by Kurt Schwarz

Above, both photos – Bird watchers at Big Slackwater. Photos by Paul Petkus

2020 Continuing Hike Series

In January, we start the year by investigating the ruins of the Goose Creek Navigation System near Leesburg, Va. In February, we return to the C&O Canal to investigate the Seneca Stone Cutting Mill, quarries, and possibly the quarry master's house and quarry cemetery. Oldtown, Md. and Knuckles Cut on the Western Maryland Railway will be our March investigative hike. Hikes for May and November are in the planning stages. For all hikes, dress for the weather, wear sturdy shoes, and bring water and lunch or a snack. Hikes are rain or shine, but will be canceled for treacherous winter weather. Cancellations will be posted on the Association's Facebook page, the website and my voice mail.

– Pat White, hikemaster@candocanal.org

The C&O Canal 2019 Through-Ride

By Jim Turner

Twelve prodigious pedalers undertook this year's Cumberland-to-Georgetown bike ride October 11-16. On the first two days, mountain morning chill and overcast skies eventually gave way to sunshine and 70-degree temperatures to make for ideal biking weather. While the next three days saw nothing but blue skies, we warily eyed our prospects for the final day covering Whites Ferry to Georgetown, as the weather forecast projected heavy rain and high winds (more on that later).

On the first day, as we assembled at the mule statue at Canal Place in Cumberland, we discovered an already hopping plaza with a row of sidewalk canopies set up to launch the second annual Great Allegheny Passage (GAP) Relay that morning. Several coed teams of runners, competing to be the first to reach Pittsburgh in an all-day and all-night run on the GAP trail, were milling about, identifiable by their shirt colors, as adrenaline-pumping music filled the air from loudspeakers. We were all flattered that such a large crowd had gathered to give us such a high-energy send-off on our ride. After an obligatory group photo at the canal's endpoint milepost, we were off.

As the ride's only rookie, who upon retiring a year ago decided to buy a bike and start exploring the C&O Canal, I had prepared myself by doing both the arm-chair work of reading and the legwork of riding the entire towpath in sections. Putting it all together in a through ride had been on my bucket list, and I was ready to "suck the marrow" out of the experience, as Thoreau might have put it. The only hazing I received from the towpath-hardened but gentle veterans was the assignment to write this trip report.

Towpath conditions were terrific—dry as a bone. Even deeply rutted ride-around spots were dry. We left the towpath for the almost silky-smooth pavement of the Western Maryland Rail Trail (WMRT) from Little Orleans down to Big Pool and appreciated the newly resurfaced towpath sections from Shepherdstown down to Brunswick and from just above Whites Ferry down to Edwards Ferry. Construction graders and rollers parked alongside the towpath testified to that ongoing project. Detours around the washouts at Little Catoc-tin Creek's Culvert 82 and just below Dargan's Bend landing were only small hiccups, thanks to the National Park Service's good work there.

People wise, mellowness ruled. Chitchat, bike-trip lore, baseball banter, stories of wonder and sorrow, and perhaps a degree of reticence cemented the bonds among us. Throughout the ride, Denny Sloppy, our thoughtful organizer and intrepid leader, maintained an easy-going pace on the towpath, stopping us for rest breaks at humane intervals.

Day One took us from Cumberland to the Paw Paw campground, during which one of us suffered not one but two flats on the same tire, leaving him feeling somewhat deflated. With two folks on the ride who graciously serve the public as orange-vested C&O bike patrol volunteers (Norman Liebow and Dave Gill), the group was well equipped to



The riders leaving Cumberland on Day 1 – Photos by Pat Hopson

handle such mishaps. Norman was our ever-vigilant sweep, and seeing the dark green pennant—emblazoned with the NPS logo—fluttering on the flagstaff on the back of his bike felt like the cavalry was always close at hand to save the day in any emergency. The traditional pit stop at the inimitable Schoolhouse Kitchen in Oldtown for lunch was unforgettable. At the end of the day's ride, Jon Wilson and Dave Gill camped at the Paw Paw campground, while the motel "muffins" shuttled back to Cumberland for food and shelter.

Day Two began with a shuttle back to Paw Paw and a morning walk through the tunnel on the way to our next destination, Hancock. Bill's Place in Little Orleans, where we stopped for lunch, is another wonderfully quirky, must-see canal-culture institution. We stopped on the WMRT to check out the closed-off Indigo Tunnel, now a bat habitat. Alas, on this day another of us had tire trouble, which yielded

easily to the skills of our fixers. In Hancock, dinner was at Buddy Lou's Restaurant, which is actually an antique store that serves food. A live band on the deck packed the place in celebration of October Fest. Our two campers overnighted in the rustic bunkhouse—known as the chicken coop, for the chicken wire on one side—at the C&O Bicycle Shop just off the towpath.

On Day Three, we made our way to Williamsport, making the usual lunch stop at Fort Frederick, where costumed French and Indian War reenactors conducted an artillery demonstration. Lunch in the visitor center's community room was capped by the traditional apple and berry pies brought from Park-N-Dine in Hancock. Arriving in Williamsport, we marveled at the restored Conococheague Aqueduct. Norman Liebow and John Betting from our group checked

out the C&OCA-funded bike repair station near the NPS visitor center parking lot. Dinner in Williamsport was at the charming Desert Rose Café, where members of our group have gotten to know well the eponymous owner over the years and where we were joined by riders from past trips: Paul Leatherman, Tom Perry, Debbie Poole and Missy Pope. It was quite a reunion of very close friends forged by the tradition of this annual ride.

Day Four was our longest day--40 miles from Williamsport to Harpers Ferry. Lunch was at the Antietam Creek campground. At Harpers Ferry, carrying our bikes and gear up the spiral staircase of the railroad bridge to cross the river went without a hitch, notwithstanding heavy pedestrian traffic due to the Columbus Day holiday weekend. The fourth and final tire repair of the trip this day didn't slow us down.

Dinner at the Canal House Café was punctuated by a lively debate over the five-second rule, when a fork retrieved from the floor nearly killed Frank Wodarczyk, who started coughing after using it. A man of science, he insisted that he wiped the fork off and that the cough, in any event, was unrelated to the fumbled fork.

On Day Five, Dave Gill left the group at Monocacy due to commitments. We made our way to Whites Ferry, where Jon Wilson, our only remaining camper, pitched his tent while the rest rode the ferry across the river and met our shuttle for a ride down to our motel in Leesburg. At a group powwow that evening, we voted to terminate the trip at Great Falls rather than Georgetown the following day, on account of the certainty of serious rain.

An early start on Day Six got us back over the river to Maryland and down to Great Falls by 10:30 a.m. We beat the rain, which fell hard in the late morning and lasted the rest of the afternoon. By prearrangement, Art Wise, a biker veteran of many previous trips but unable to ride this year, graciously met us at Great Falls Tavern with a lunch of sandwiches and snacks, which we enjoyed in the community room while awaiting the shuttle to take us back to our cars at Rockville, Big Pool and Cumberland.

Special thanks to Denny Sloppy for his trip coordination and leadership, to Norman Liebow for his magisterial command of how to repair bicycles, to Pat Hopson and John Betting for their photo documentary acumen, and to everyone for being fun to be with.



All riders at the halfway point, Mile 92.25, except photographer Pat Hopson. Kneeling: Denny Sloppy. Standing, l to r: Jon Wilson, John Betting, Pam Lantz, Kathy Merchant, Katrina Craddock, Donna Sloppy, Dave Gill, Frank Wodarczyk, Jim Turner, and Norman Liebow.



Pam and Katrina at The Point at Harpers Ferry.

2020 Programs and Calendar

By Steve Dean

The C&O Canal Association calendar for 2020 includes a diverse range of activities. Six hikes, four paddling events and five nature walks are featured, in addition to our three traditional events that combine a meal and program with a walk on the canal.

Pat White shares her wealth of knowledge throughout the year on and around the C&O Canal with her Continuing Hike Series. Bill Holdsworth leads the traditional frostbite hike in the D.C. area, which is a great way to enjoy a walk on a brisk day before the holiday season sets in. Barbara Sheridan and Anthony Laing lead challenging and rewarding paddling trips on the waterways, and their events are always popular.

Discover birds, wildflowers, butterflies and dragonflies on a trip on the canal on hikes organized by Nature Committee chair Paul Petkus. The popular tree hikes are taking a year off but should be back in 2021. The through-ride organized by Pat Hopson and Denny Sloppy is always an adventure - read the story in this newsletter about their 2019 trek. Plans are in the works for the Douglas Hike, which will include a program by Don Peterson about the remarkable Indian fish traps in the Potomac River. The Presidents' Day Breakfast will be followed by a hike to explore the newly opened Western Maryland Rail Trail in the Little Orleans area. For the Heritage Hike, we'll head west and possibly explore the stabilization work done to the Round Top Cement Mill above Hancock. And don't forget – on our Douglas and Heritage hikes, a cold, sweet treat is provided for towpath hikers, along with a few words of wisdom, by everyone's favorite ice cream man – Norman Liebow!

As always, if you have any questions or suggestions, please contact the program coordinator at programs@candocanal.org. If you're interested in leading an event or helping to organize one, please contact us. We hope we see you at one or more of our events in 2020!

Calendar of Events - 2020

Non-C&OCA Event
C&OCA Business
C&OCA Hike and Dinner or Key Event
C&OCA Hike
C&OCA Nature Walk
C&OCA Volunteer Event
C&OCA Paddle Trip
C&OCA Bike Ride
Jan. 12, Sun., Continuing Hike Series , 10:30 a.m., Goose Creek, Va. Kephart Bridge Landing (43942 Riverpoint Drive, Sterling VA). Group will walk downstream to view remains of locks and canal. Contact Pat White at 301-977-5628 or hikemaster@candocanal.org .
Feb. 2, Sun., Board Meeting , 1 p.m., at Williamsport Town Hall, 2 North Conococheague St.
Feb. 29, Sat., Continuing Hike Series , 10:30 a.m., Rileys Lock, Mile 23.8. Seneca Stone Cutting Mill, Quarries, and Quarry Cemetery. Contact Pat White at 301-977-5628 or hikemaster@candocanal.org .
Mar. 1, Sun., Reservations due for Annual Meeting lunch or dinner.

Mar. 14, Sat., **C&O Canal Association Annual Meeting** at Upper Montgomery County Fire Department, 19801 Beallsville Road (Maryland Route 109), just north of the junction with Route 28.

- 11:30 a.m.-1 p.m., Meet the candidates with optional lunch
- 1-4 p.m. Annual meeting
- 4-5 p.m. Happy hour
- 5-6 p.m. Dinner

A registration form is included in this newsletter and on-line reservation is available at www.candocanal.org/calendar.html.

Mar. 29, Sun., **Continuing Hike Series**, 10:30 a.m., Lock 70 in Oldtown, Upstream from mile 166.7. Contact Pat White at hikemaster@candocanal.org or 301-977-5628.

Apr. 5, Sun., **Board Meeting**, 1:30-4:30 p.m., at Glen Echo Town Hall, 6106 Harvard Ave.

Apr. 12, Sun., **Nature Walk** focusing on wildflowers, 10 a.m., Shepherdstown. Meet at the larger parking lot below Lock 38. Bring your favorite wildflower identification book, water, and a snack. For further information, contact Tom Aitken at thomasaitken01@comcast.net or 304-279-0521.

Apr. 18, Sat., **Potomac Watershed Cleanup**, 9 a.m. to noon. The C&O Canal Association will be operating or coordinating various sites. Contact Jim Heins at 301-949-3518 or vip@candocanal.org.

Apr. 18, Sat., **Monocacy Aqueduct/Lock 27 Area Cleanup**, 9 a.m. to noon. Jon Wolz will conduct an independent cleanup effort in support of the Potomac Watershed Cleanup project. Contact Jon Wolz at Wolzjon@hotmail.com.

Calendar of Events - 2020 (Continued)

Apr. 25, Sat., Douglas Hike and Dinner. Hikes of varying lengths. Location will be in the Harpers Ferry and Brunswick areas and details will be announced in the March <i>Along the Towpath</i> . For more information, contact Steve Dean at programs@candocanal.org or 301-904-9068.	Aug. 2, Sun., Board Meeting , 1 p.m., at Glen Echo Town Hall, 6106 Harvard Ave
May 2, Sat., Nature Walk focusing on birds, 8-11 a.m., Rileys Lock. Focus will be on finding prothonotary warblers and any migrant songbirds. Kurt Schwarz of the Maryland Ornithological Society will lead the group. You must register for this walk. To register, or for more information, contact Kurt at krschwa1@verizon.net or 410-461-1643 (home) or 443-538-2370 (cell).	Aug. 8, Sat., Nature Walk focusing on dragonflies and damselflies, 10 a.m., Dickerson Conservation Area. Bring water and a dragonfly guide if you have one. For further information contact Steve Dean at levelwalker@candocanal.org or 301-904-9068.
May 16, Sat., Paddle Trip on the Potomac from Brunswick to the Monocacy Aqueduct (approx. 13 miles). For more information, contact Tony Laing at canoemaster@candocanal.org or 301-980-8932.	Aug. 28-30, Fri.-Sun. Paddle Trip in the Paw Paw Bends area of the Potomac River from Paw Paw, W.Va. to Little Orleans, Md. (22 miles). This 3-day paddle trip includes two nights camping out. Reservations are required and paddlers must provide their own canoe/kayak and associated paddling/camping gear. Paddlers are expected to contribute to community-type meals and help out in camp. For more information and to make reservations, contact Barbara Sheridan at canoemaster@candocanal.org or 301-752-5436.
May 17, Sun., Continuing Hike Series , 10:30 a.m., location to be announced. Contact Pat White at hikemaster@candocanal.org or 301-977-5628.	Sept. 5, Sat., Nature Walk focusing on birds, 8-11 a.m., location to be announced. Numerous migrant birds are expected to be seen. Kurt Schwarz of the Maryland Ornithological Society will lead the group. You must register for this walk. To register, or for more information, contact Kurt at krschwa1@verizon.net or 410-461-1643 (home) or 443-538-2370 (cell).
June 6, Sat., Presidents' Breakfast at 9 a.m. at Bill's Place in Little Orleans, Md., celebrating Association presidents and enjoying general fellowship. Optional hike along the Western Maryland Rail Trail will follow. Contact Steve Dean at programs@candocanal.org or 301-904-9068. Some members enjoy camping the night before at Little Orleans Campground; call at 301-478-2325.	Sept. 20-24, Sun.-Thu., World Canals Conference , Leipzig, Germany. For more information, see http://www.wccleipzig2020.com/ .
June 7, Sun., Board Meeting , 1 p.m., at Williamsport Town Hall, 2 North Conococheague St.	Oct. 4, Sun., Board Meeting , 1 p.m., at Williamsport Town Hall, 2 North Conococheague St.
June 13, Sat., One-day Paddle Trip on the Monocacy River. Reservations are required. For more information and to make reservations, contact Barbara Sheridan at canoemaster@candocanal.org or 301-752-5436.	Oct. 9-14, Fri.-Wed., Through Bike Ride , Cumberland to Georgetown. No sag wagon provided. Reservations required; reserve no later than September 1. Limited to 20 riders. To register or for more information, contact Denny Sloppy at dennysloppy@yahoo.com or 814-577-5877.
July 11, Sat., Nature Walk focusing on butterflies, 11 a.m., Dickerson Conservation Area. Bring your favorite butterfly identification book, binoculars, water and a snack. For further information contact Paul Petkus at papetkus@gmail.com or 773-450-6039. Walk will be canceled in case of inclement weather.	Oct. 24, Sat., Heritage Hike and Dinner. Hikes of varying lengths. Location will be in the Hancock area and details will be announced in the September <i>Along the Towpath</i> . For more information, contact Steve Dean at programs@candocanal.org or 301-904-9068.
July 11, Sat., Paddle Trip from Rileys Lock (Seneca) through the old Potowmack Canal on the Virginia side of the Potomac to Pennyfield Lock. This trip is approximately 4.5 miles and takes only about 4 or 5 hours, but is challenging with numerous rocks and ledges in the old canal. Reservations are required. For more information and to make reservations, contact Tony Laing at canoemaster@candocanal.org or 301-980-8932.	Nov. 22, Sun., Continuing Hike Series , 10:30 a.m., location to be announced. Contact Pat White at hikemaster@candocanal.org or 301-977-5628.
	Dec. 5, Sat., Frostbite Hike , 10:30 a.m. Location will be announced in the September <i>Along the Towpath</i> .
	Dec. 6, Sun., Board Meeting , 1 p.m., at Glen Echo Town Hall, 6106 Harvard Ave.

Important Information About Association Events

- Liability waivers are required for many Association activities. You will be asked to sign a waiver before participating in certain events.
- While we strive to accommodate late sign-ups, please try to register before the RSVP dates.
- Hikes require proper footwear.
- Paddling, hiking and biking participants are responsible for their own equipment and food.
- Reservations are required for many events.
- Outdoor events are subject to cancellation in the event of inclement weather. Contact the event coordinator in the event of weather concerns.
- Visit www.candocanal.org/calendar.html or follow Facebook @candocanal.org for up-to-date event information.

2021 World Canals Conference Update

By Bill Holdsworth

The countdown stands at 20 months. The Association's World Canals Conference committee can hear the clock ticking in the background, as preparations continue for the August 30 – September 2, 2021 event.

Venue – In October the Association signed a contract to rent the Maryland Theater in Hagerstown for the conference. The theater began life as a vaudeville house in 1915. It converted to a movie theater in the 1920s and fell on hard times in the 1970s before being saved by local preservation efforts. A recent expansion transformed the theater into a performing arts complex.

The opening and closing sessions will have the 1,300-seat historic auditorium available. Smaller sessions can take advantage of the new 300-seat ballroom space and 150-seat

rehearsal studio. A mezzanine-level concession area and orchestra-level lobby offer space for exhibitors and networking during breaks.

Heart of Civil War Heritage Area Mini-Grant – The Association is grateful to HCWHA for a \$2800 mini-grant that helped support the development of the conference website and provided half the funding for the theater rental deposit.

Matched donations – We hope Association members will continue their generous support of the conference. Your donations are doubly effective.

An anonymous donor continues to match member donations dollar-for-dollar up to a limit of \$10,000. By the end of September we had received more than \$5,500 in contributions towards that goal.



Maryland Theatre on the evening of its ribbon cutting, October 11, 2019 – Photo by Bill Holdsworth



IWI President David Edwards-May and C&O Canal Association President Bill Holdsworth visited the construction site for the expansion of the Maryland Theatre in June 2019 – Photo by Kerry Gruber

C&O CANAL NATIONAL HISTORICAL PARK Telephone Numbers and Personnel

C&O Canal National Historical Park Headquarters

1850 Dual Highway, Suite 100, Hagerstown, MD 21740

Superintendent (Acting)	301-714-2202	John Noel
Deputy Superintendent	301-714-2200	John Noel
Superintendent's Assistant	301-714-2201	Linzy French
Chief Ranger	301-714-2222	Ed Wenschhof
Chief of Business Mgmt. (Acting)	301-714-2204	John Lampard
Chief of Resource Mgmt.	301-714-2225	Jeri DeYoung
Chief of Maintenance (Acting)	301-714-2211	Curtis Rintz
Chief of Interpretation, Education and Volunteers (Acting)	301-714-2238	Emily Hewitt
Partnerships Coordinator	301-714-2218	Ben Helwig
Volunteer Coordinator	301-491-7309	Emily Hewitt
Cultural Resources Manager/Historian	301-491-2236	Vacant
Historian	301-714-2220	Karen Gray
Safety Office	301-745-5804	John Adams
IT Specialist	301-745-5817	John Lampard

Palisades District – Mile 0 (Tidelock) to Mile 42.19 (Monocacy River)
11710 MacArthur Blvd, Potomac, Md.

Interpretive Supervisor	301-767-3702	Pete Peterson
District Ranger Law Enforcement	301-491-6279	Joshua Cunningham
Supervisory Visitor Use Assistant	301-767-3703	Shaun Lehmann
Georgetown Interpretive Supervisor	240-291-8466	Brendan Wilson

Great Falls Tavern Visitor Center 301-767-3714
11710 MacArthur Blvd, Potomac, Md.

Western Maryland District – Mile 42.19 (Monocacy River) to Mile 184.5
(Canal Terminus, Cumberland, Md.)

District Ranger Law Enforcement	301-722-0543	Todd Stanton
Cumberland Subdistrict	301-722-0543	
Hancock Subdistrict	301-678-5463	
Ferry Hill Subdistrict	301-714-2206	

Williamsport Visitor Center 301-582-0813
205 West Potomac St., Williamsport, Md.

Supervisory Park Ranger	240-625-2931	Joshua Nolen
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Hancock Visitor Center 301-745-5877
439 East Main St., Hancock Md.

Supervisory Park Ranger		Joshua Nolen
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Cumberland Visitor Center 301-722-8226
Western Maryland Station, Cumberland, Md.

Supervisory Park Ranger		Stephanie Siemek
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OTHER USEFUL TELEPHONE NUMBERS:

Great Falls Boat Operation	301-767-3714
Boathouse at Fletcher's Cove (concessionaire)	202-244-0461
Carderock and Marsden Reservations	301-767-3731
Canal Quarters Program	301-714-2233
Williamsport Boat Operations	301-582-0813

24-HOUR EMERGENCY
(TOLL FREE): 1-866-677-6677
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ISSN 2575-9876

Along the Towpath is published in March, June, September,
and December by the C&O Canal Association (C&OCA), P.O.
Box 366, Glen Echo, MD 20812-0366.

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Editor and Producer: Steve Dean – editor@candocanal.org

Associate Editors: Tom Aitken, Dave Johnson,
Nancy Long and Ned Preston.

Printed by HBP, Hagerstown, Md. www.hbp.com

C&O CANAL ASSOCIATION

Membership in C&OCA is open to all persons with an interest in the
C&O Canal, the C&O Canal National Historical Park, and the Po-
tomac River Basin. Annual membership dues are: \$15 individual, \$20
family, and \$25 patron, assessed on a calendar-year basis, and include
subscription to the newsletter. Dues should be mailed in to the C&O
Canal Association. C&OCA 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 fullest extent of the law. A copy of our current
financial statement is available upon request by writing to C&OCA at
the address above or calling 301-983-0825. Documents and informa-
tion submitted to the State of Maryland under the Maryland Char-
itable Solicitations Act are available from the Office of the Secretary of
State for the cost of copying and postage.

C&OCA maintains a home page at www.candocanal.org. The web-
master is webmaster@candocanal.org. C&OCA also maintains a tele-
phone number for recorded information and inquiries: 301-983-0825.

Association Officers

President: Bill Holdsworth, president@candocanal.org

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Second Vice President: Steve Dean, levelwalker@candocanal.org

Secretary: Kerry Gruber, secretary@candocanal.org

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Information Officer: Doug Zveare, inquiries@candocanal.org

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ference 2021, Bill Holdsworth.

CHESAPEAKE & OHIO CANAL ASSOCIATION INC.

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Along The Towpath

Chesapeake & Ohio Canal Association

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Culvert 141, at Mile 110.1, is easily viewed – one has to simply walk to the lower end of the McCoy's Ferry campground. It features a distinctive 15-foot high parapet that is similar in design to Culvert 144 about 3/4 mile upstream. This 4-foot arch stream culvert was originally intended to be a rectangular box type until the Canal Company opted for a uniform design of semi-circular arches on smaller culverts. Photo by Steve Dean

Check us out on social media!

C&O Canal Association



Founded in 1954



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In This Issue

Locks 3 and 4	1
Annual Meeting and Candidates	2
President's Report	4
Nancy C. Long Aqueduct Preservation Fund	4
Donors to Association Funds	5
New Members	5
Accompanied by the Past	9
Volunteers In Parks	12
Wayside Cleaning Project	13
Milepost Painting Project	14
Across the Berm	14
On the Level	15
Delaware and Hudson Canal	18
Nature Notes	20
Bird Nature Walk	21
Continuing Hike Series	21
Thru-Ride	22
Calendar	24
2021 World Canals Conference Update	26
Contacts	27