

# 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.

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## Association Special Projects Committee

By Susan VanHaften

Do you have a favorite project you would like to see the Association take on? Association members can help the Park, the canal, and the Potomac River basin in two ways: by volunteering our time and our effort, and by providing funding for projects. We have well-established ways to help by volunteering — VIPs, garlic mustard warriors, the “bench bunch,” level walkers, Swains Lock Stewardship. But our long standing practice of funding specific projects does not follow a regular schedule. Over the past several months, the Special Projects Committee has been working on criteria for projects and a list of possible projects to fund.

Projects we considered came from suggestions provided by members, projects we had funded in the past, and from brainstorming. We categorized each of them by several criteria:

- Impact: the value of doing the project and the loss if the project were not done,
- Scale: estimated size of the project (small, medium or large),
- Duration: the amount of time each project would take to complete (less than one year, one to three years, over three years),
- Cost: the estimated project cost (under \$2,000, \$2,000–\$20,000, \$20,000–\$100,000, over \$100,000),
- Association leaders: who in the Association would take the lead on the project,
- Other partners: the possible involvement of other park partners,
- Park participation: anticipated official canal park involvement,

- Park strategic plan: how and if the project fit into the Park’s strategic plan. We did not rule out projects that did not fit into the Park’s current strategic plan.

To prioritize the projects, we looked at the scale and duration of each project and the probability of completing it (“doability”). We then assigned a high, medium, or low priority to the project. The following is a list of projects, by priority, in no particular order within each group.

(Continued on page 2)



*The Monocacy Aqueduct – Support of park structures is one of the many concerns of the Special Projects Committee – Photo by Steve Dean*

### Special Projects Committee (Continued from previous page)

- High priority: funding seasonal staff in Cumberland; funding Park travel to the 2020 World Canals Conference in Leipzig; purchasing mules; support for *The Cumberland*; Bowles House repairs; new documentary films for the Park visitor centers; Monocacy Aqueduct maintenance; and renewal of wayside exhibits.
- Medium priority: support for *The Mercer*; new waysides at Locks 51 and 52 (Hancock); Seneca stone cutting mill preservation; extension of the Civilian Conservation Corps wayside exhibit project; and video of C&O Canal Association activities.
- Low priority: towpath continuity emergency funding; hiker/biker site maintenance; Lockhouse 75 repairs; Seneca Aqueduct restoration; Tonoloway Aqueduct restoration; Evitts Creek Aqueduct restoration; and Paw Paw education pavilion.

You can find out more information about these projects on the Association website (<http://www.candocanal.org/strategic.html>)

We presented our recommendations to the Board at the December 2019 meeting. While the Board approved our methodology and our suggested list of projects as a starting point for reaching out to the Park and to other interested parties, we did not ask for funding nor did the Board approve money at that point. We plan to discuss our list with the Park.

Each project needs an Association leader. For the larger projects, this person should be supported by a dedicated team. Although many of the projects already have leadership in place, below is a list of those that do not:

- Most obviously, the aqueduct restorations (Seneca, Tonoloway, Evitts Creek). Through a generous donation by Association member Nancy Long, we now have an aqueduct fund. Other members have been contributing to this fund. While there is not enough money to fund a complete restoration, we could provide seed money for the larger effort.
- New documentary film for the Park visitor centers. The film currently being shown is out of date. The Park will celebrate its 50<sup>th</sup> anniversary in 2021. This seems a perfect time for a new documentary film.
- Seneca stone cutting mill: near the Seneca Creek Aqueduct, the mill quarried red sandstone and limestone used in construction of locks, aqueducts, and other structures along the canal.
- Extension of the CCC wayside exhibit: the Association has a project underway to create waysides at Carderock

to document the CCC work done there. This project could be extended to waysides near Lockhouse 15 and Great Falls, where the CCC also did work.

If you have a passion for a particular project and would either like to “honcho” it or work with other Association members to make it happen, please let the Special Projects Committee know. In several cases, we ranked these projects as a “low priority” simply because we do not have anyone in the Association who has stepped forward to head them up.

If you are interested in becoming involved with any of the suggested projects, please contact the Special Projects Committee at [special-projects@candocanal.org](mailto:special-projects@candocanal.org)

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## Request for a Videographer

The Association is looking for a skilled videographer who would like to volunteer to create a video for the Association. We want to showcase the many hours of volunteering our members provide to the park, whether they be through level walking or VIP activities such as installing benches, pulling garlic mustard, painting picnic tables, or serving as stewards at Swain's lock. If interested, please contact the Special Projects Committee at [special-projects@candocanal.org](mailto:special-projects@candocanal.org).

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## Culvert 82 Shuttle Support

The C&O Canal Association was recently recognized by the Canal Towns Partnership for support of a free shuttle that was provided for cyclists and hikers between Miles 48 and 55 from May 25 to July 7, 2019.

The shuttle bypassed the towpath breach at Culvert 82 and saved towpath users from traversing a dangerous highway in the area. This is another way that your donations to the Association are used to support the park and park visitors.





# President's Report

By Bill Holdsworth

We welcome Tina Cappetta as the first new superintendent of the C&O Canal National Historical Park in 15 years. Tina comes to the canal from Fort McHenry where she served as superintendent.

Tina is returning to familiar territory. From 2002 to 2004, she was chief of the Natural and Cultural Resource Management Branch in our park. Recently Rod Mackler was researching an issue with a proposed truck stop in Williamsport. He found a 2003 letter from the park in opposition, signed by Tina. Some issues take more than 17 years to resolve.

I met Tina at the 2020 Maryland Preservation Awards on January 23 at the Miller Senate Office Building in Annapolis. The Association shared in the award for the restoration of Swains Lockhouse.

C&O Canal Trust led the restoration effort and was recognized for Project Excellence in Preservation Partnerships. The Association, the Friends of Historic Great Falls Tavern, and the C&O Canal National Historical Park shared in the award.

The Association is dependent on volunteers. Valuable people on the board of directors will be approaching term limits. We need fresh blood to help the Association thrive. If you think you can help, contact the nominating committee chair. Similarly, if the nominating committee contacts you, I hope you will be receptive.

We need computer-literate volunteers. The Association is embracing more technology. Elisabeth Groth has recently boosted our presence on Facebook. Because of her work, you

can find us on Twitter and Instagram. We have transitioned our membership database to a cloud-based platform. We plan to convert the website to WordPress in the coming months.

You don't need programming skills to help. You just need to be comfortable working with software. These modern tools allow us to collaborate more easily. Until recently the membership database resided on Will Stewart's computer. Now that it's cloud-based, multiple users can update the database and we can share the work. Currently, any updates to our website start on my computer. After the website transitions to WordPress, that will no longer be true. Multiple people can share responsibility for updates.

If you think you can help, let me know.



*Presentation of the Project Excellence Award. Pictured (l-r) Elizabeth Hughes, Director, Maryland Historical Trust; Tina Cappetta, Superintendent, C&O Canal NHP; Robin Zanotti, President, C&O Canal Trust; Bill Holdsworth, President, C&O Canal Association; and Don Harrison, President, Friends of Historic Great Falls Tavern – Photo courtesy of the C&O Canal Trust*



*Tina Cappetta – Photo courtesy of the National Park Service*



*The Maryland Preservation Award*

# Donors to Association Funds

## *November 1, 2019 to January 31, 2020*

### **Nancy C. Long Aqueduct Fund – A**

– 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.

### **The Cumberland Repair & Maintenance – C**

– Donations specifically identified for repair and maintenance of the historic canal boat replica in Cumberland.

### **Davies Legal Fund – D**

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

### **Ken Rollins C&O Canal Fund – R**

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

### **Rachel Stewart Swains Lock Area Fund – S**

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

### **2021 World Canals Conference Fund – W**

– 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.

James Alden – **A, W**

Christopher F. Allison – **R**

American Painting Fine Art – **A**

Jane Amero – **A**

Katherine Andrie – **A**

Wilton Baker – **R**

Kathleen Barber – **W**

William & Rita Bauman – **C**

John Beck – **A**

John & Janice Belz – **A**

Nancy L. Benco – **R, W**

James R. Biasco – **R, W**

Kathleen A. Bilton – **W**

David & Barbara Biser – **W**

John Bogdan Jr. – **A, D, R**

Todd & Judith Bolton – **A**

Louis & Phyllis Borwitt Ph.D.  
– **A, D, R, S, W**

Artemus O. Brown – **R**

Marney Bruce – **A, D, R, S, W**

Michael & Judith Bucci – **W**

Ralph & Karen Buglass – **W**

John & Renee Butler – **A, D, S**

Derek & Laura Byerlee – **R**

Jo Ann Condry – **A**

Alford & Rita Cooley – **R**

Frank D. Correl – **R**

Jay Creswell – **R**

Steve & Diana Dean – **A, R, W**

Louise F. Delavergne – **W**

Harry T. Demoll – **D**

Emma Rose Dieter – **W**

William D. Dorko – **R**

Larry Lee Dreyer – **A, D, R, S, W**

Ruth Dudgeon – **A**

Bruce & Linda Dwyer – **R**

Jack M. Ebersole – **R**

Joseph & Jane Eckels – **A**

Sharon G. Elliott – **D, R**

David & Audrey Engstrom – **A, R**

Jonathan & Linda Field – **R, W**

K.S. Fisher – **A**

Jude & Mary Franklin – **S**

John & Janice Frye – **A, D, R, S**

Carol Popper Galaty – **R**

Anne W. Gale – **W**

Steven Garron – **D**

Lazlo Gere – **R**

Craig & Lois Giles – **W**

Karen M. Gray – **D**

Kerry J. Gruber – **A, S, W**

Anya Grundmann – **R**

Theresa E. Hallquist – **A, D, R, S**

John C. Harden – **A, D, R, S, W**

Thad L. Hecht – **A**

James & Janet Heins – **S**

Benjamin & Jennifer Helwig – **W**

Christopher Herrle – **A, D, R, S, W**

William Herrmann – **S**

William & Christine Holdsworth – **W**

Jack Holman – **R**

Lynne Hottell – **W**

John & Shizue Howe Jr. – **A**

William C. Howell – **A, D, R**

David T. Irvine – **A**

Meghan Jacquot – **R, W**

Elizabeth B. James – **A**

James Johnson – **R**

Ms. Carolyn W. Johnson – **R**

Nanette C. Johnson – **A, W**

David M. Johnson – **W**

Richard M. Jones – **W**

Sandra B. Kahn – **W**

Ann Kelton – **D**

Thomas & Anne Kerfoot – **R**

Karlen Keto – **S**

John & Carol Kimbrough Jr. – **R**

Sara B. Kochenderfer – **R**

John W. Kochowicz – **S**

E.S. & H.J. Krafur – **A**

Dennis J. Kubicki – **R**



Laurence & Ellen Langan – *A, D, R, S, W*  
 Paul T. Langevin – *A*  
 Peter Laugesen – *W*  
 John & April League – *R*  
 Daniel Leubecker III – *R*  
 Dr. George & Pamela Lewis Jr. – *A, D*  
 Francis Denis & Elisabeth Light – *A, W*  
 Thomas & Linda Lightfoot – *A*  
 David & Katie Long – *A*  
 Charlotte Loveless – *W*  
 Marlow & Nancy Madeoy – *W*  
 Kristine Marames – *D*  
 Linda & Michael Marmer – *A, D, R, S, W*  
 Margie Martin – *W*  
 J.C. & M.C. Marziani – *R*  
 Robert & Marie Masincup – *A, D, R, W*  
 Thomas & Dorothy Mathieson – *R*  
 Stephen R. Matula – *A, W*  
 William & Susan McAllister – *R, W*  
 Donald & Nancy McEntee Jr. – *R, W*  
 Kitty McEwan – *R*  
 Mary Meehan – *S*  
 Wallace R. Meissner – *A*  
 Daniel Mick – *W*  
 Kathy & Mijodrag Miljanic – *R*  
 Ronald & Pamela Morith – *A, D, W*  
 James & Judith Nelson – *R*  
 William Nestor – *W*  
 Diana K. Niskern – *A, R*  
 Ronald & Linda Nosalik – *R*  
 Thomas E. Odea – *D*  
 Judith S. Olmer – *D, R*  
 Mark D. Pankin – *R*  
 Joan G. Paull – *A, D, R, S, W*  
 Charles Pekow – *R*  
 Jeanette M. Penner – *A, S*  
 Dr. Stanley J. Perper – *W*  
 Thomas & Linda Perry – *R*  
 Patricia M. Pickering – *A, W*  
 Pat & Roger Plaskett – *R*

Mark W. Podvia – *A, W*  
 Katherine L. Poore – *A, R, S*  
 Ned & Leni Preston – *R*  
 Carol Purcell – *A, D, R, S, W*  
 Patrick Raher – *D*  
 William Ravenscroft – *D*  
 Rod & Pam Rempt – *R*  
 Craig A. Reynolds – *A, D, R, W*  
 Craig & Sandi Roberts – *W*  
 Edward & Patricia Rogers – *D*  
 Lisa Rosenthal – *A, D, R, S, W*  
 Sue A. Rowland – *A, W*  
 Gregory & Deloras Russo – *R*  
 Patrick & Erica Jo Saccoia Jr. – *R*  
 Lois Schiffer – *D*  
 Cory Schlegel – *A*  
 Jan Schoonmaker – *R*  
 Mr. Simon Schuchat – *R*  
 Kurt Schwarz – *A, R, W*  
 Michael Shallenberger – *D, R*  
 Napier Shelton – *W*  
 Sally Sherman – *D*  
 Robert & Karen Shoemaker – *S*  
 Sierra Club Potomac Region Outings – *R*  
 Rima Silenas – *A, D, R, S, W*  
 Bridget Sisson – *A, D, R, S*  
 Leonard & Joyce Skoglund – *A, D, R, W*  
 Susi Slocum – *W*  
 Karen Smith – *D, R*  
 Jayme Sokolow – *S*  
 Howard & Dolores Solomon – *R*  
 James Spangenberg – *R*  
 Wallace H. Spaulding – *R*  
 Michael & Lynn Springer – *R*  
 Bruce Staskiews – *A*  
 Robert & Jody Stevens – *A, R*  
 William R. Stewart – *W*  
 Edwin Stockham – *A*  
 Mark Stover – *R*  
 Diane Summerhill – *R*  
 Anne Sumner – *D, R, S*

Marcia Swain – *S*  
 George M. Swisko – *D, W*  
 Tim & Carolyn Taylor – *R*  
 Steven Teitelbaum – *R*  
 C. Jean Toleman – *A, D, R, W*  
 William Trout – *W*  
 Frank W. Valentine – *A, D, R, S, W*  
 Porter & Marjorie Venn – *A, D, R, S, W*  
 James P. Waite III – *A*  
 Lynn C. Walker, D.V.M. – *R*  
 Ralph Earl Watkins – *R*  
 Jane M. Weisemann – *R*  
 Walter & Elizabeth Wessel – *A*  
 Katrinka Westendorf – *A, R, S, W*  
 John Wheeler – *A*  
 Patricia Ann White – *W*  
 Peter B. Williams – *R, W*  
 Kristine M. Wilson – *D, R*  
 Mary Pat Wilson – *D*  
 Kristine M. Wilson – *A, S, W*  
 Francis John Wodarczyk – *A, D, R, S, W*  
 Ed Wojtaszek – *D, R*  
 Linda Worthington – *R, W*  
 George & Julie Wyeth – *R*  
 Douglas Zveare – *A, D, R, S, W*

*In Memory of Randy Astarb*

Jane & Norman Liebow – *R*

*In Memory of Hal and Jane Larsen*

Anna Porter – *R*

*In Memory of Marion Robertson*

Donald Robertson – *R*

Stephen Williams – *W*

*In Memory of Rachel Stewart*

Adrian R. Stewart – *S*



# Benjamin Latrobe's Potomac Marble Quarries

By Paul Kreingold

## Introduction

The destruction of Washington, D.C. in August, 1814 by the invading British challenged President Monroe and Benjamin Latrobe with the task of rebuilding the edifices which had been destroyed. As did Washington and Jefferson earlier, they understood that the principal buildings of the government were not mere offices but symbols of the aspirations of the Republic. They had to be functional as well as beautiful. As classicists, their notions of beauty were derived from the ancient Greek and Roman Republics. As with the Greeks and Romans, the preferred building material was marble. The question was, where was such building material to be found?

In a report to the Committee on Public Buildings on November 28<sup>th</sup>, 1816, Benjamin Latrobe describes a stone which is a "very hard but beautiful marble" and "has been proved to answer every expectation that was formed, not only of its beauty, but of its capacity to furnish columns of any length, and to be applicable to any purpose to which colored marble can be applied." Latrobe continues, "The quarries are situated in Loudoun County, Virginia and Montgomery County, Maryland."<sup>1</sup>

Latrobe is describing Potomac marble, which is a ubiquitous limestone conglomerate whose deposits stretch from south of Leesburg, Virginia to the shores of the Potomac River in Montgomery County, Maryland. It is not actually marble, which is metamorphosed limestone, but a sedimentary conglomerate consisting of pebbles of various sizes and composition (clasts) held together by a limestone (calcium carbonate) matrix. Ultimately, Potomac marble was used by Latrobe for the columns in the Capitol's old House and Senate chambers. The unique characteristic of this marble is its color described here by Latrobe: "as the Cement which unites the pebbles does not receive quite so high a polish as the pebbles themselves, the Mass acquires a spangled appearance, which adds greatly to the brilliancy of its effect."<sup>2</sup> Visitors to the old Senate and House Chamber (Statuary) can still wonder at the beauty of these columns, now two-hundred years old.



Potomac Marble Columns in the Old House Chamber of Capitol –  
Photo by Paul Kreingold

## Loudoun County, Virginia and Montgomery County, Maryland

The investigator who desires to search for the remains of the Potomac marble quarries in Loudoun and Montgomery Counties will find himself quite frustrated as the specific locations are never revealed by either contemporaries or those that write about them. The mystery starts quite early. For example, Samuel Lane, the Commissioner of Public Buildings lists a disbursement dated May 21, 1816 for \$16.00 for "Hack hire to marble quarries" and another paid to Latrobe for \$161.27 for "Expenses exploring marble quarries."<sup>3</sup> Which marble quarries? Who owns them? Where are they?

Latrobe's biographer Talbot Hamlin, in his six-hundred-page work, makes no attempt to identify quarry locations and only repeats a story told by Latrobe's son about the discovery of the marble on the Loudoun estate of Samuel Clapton. He implies that the quarries were on this estate but there is no other proof of this and much of the rest of the story is apocryphal.<sup>4</sup>

Other historians write that the marble came from the "banks of the Potomac River, just above Conrad's Ferry";<sup>5</sup> "both sides of the Potomac River in Loudoun County, Virginia and Montgomery County Maryland";<sup>6</sup> and "in Loudoun County Virginia."<sup>7</sup>

Cartographers are not any clearer. For example, a much-quoted early Loudoun cartographer, Yardley Taylor, while discussing Potomac marble in his 1858 *Memoir of Loudoun County* says, "This rock was used for the pillars in the Capitol at Washington, and may be seen in the Representatives Hall and Senate Chamber."<sup>8</sup> Mr. Taylor never identifies a Loudoun quarry location even on his 1853 map which is the first detailed map of Loudoun County and can be seen at the Balch Library in Leesburg.

Geologists are no exception. The 1898 Maryland Geological Survey reports, "There is some doubt as to the exact location of the particular source of these blocks used in the capitol."<sup>9</sup> Joseph K. Roberts writes in his 1928 book, the *Geology of the Triassic*:



The rock was first noted by B.H. Latrobe who selected it for columns in the National Capitol. It would seem from Latrobe's account that the quarries from which the stone was taken were located in Loudoun County, Virginia and in Montgomery County, Maryland.<sup>10</sup>

There's that phrase again!

Loudoun historian and mapmaker Eugene Scheel suggests two locations in Loudoun which may have been sources of Potomac marble for Latrobe. These are Olde Izaak Walton Park and the Leesburg Limestone Quarry both in the town limits of Leesburg.<sup>11</sup> These are real possibilities but require more investigation. It should be noted that Scheel identifies the pond at Olde Izaak Walton Park as the filled in quarry. I have mapped the depth of that pond and nowhere is it more than seven feet deep. Additionally, I have photographs from 1955 of Izaak Walton members digging that pond.<sup>12</sup> The actual quarry in that park is about 200 yards south of the pond hidden by trees and poison ivy.

Government publications do not provide much more help. In a pamphlet published in 1975 by the U.S. Department of Interior, *Building Stones of Our Nation's Capital*, it is written: "Until the Chesapeake and Ohio Canal was finished, the huge blocks were brought overland from quarries near Point of Rocks, Maryland, 46 miles west of Washington."<sup>13</sup> Interestingly, when that pamphlet was re-published in 1998 it was ten pages smaller and only says that Potomac marble came from "various localities."<sup>14</sup>

There is, on the Chesapeake & Ohio Canal towpath a Marble Quarry hiker-biker camp at Milepost 38.2. On the C&O Canal Trust web page it is described as follows:

According to old maps, before the C&O Canal was built, there was a 'Marble Quarry' running along the Maryland side of the river for over a mile. The stone that was quarried here was known as 'Potomac marble,' which wasn't a solid substance, but rather was composed of angular pebbles held together by a limestone matrix. Benjamin Latrobe discovered Potomac marble with its varied and rich colors and made the decision to include it in the Capitol buildings he was designing.<sup>15</sup>

I have found no evidence of a quarry near this campsite.

This leads us to ask, "Doesn't there exist at least one two-hundred-year-old hole-in-the-ground which we can prove was a source of the Potomac marble for the columns in the Capitol?" Now, at last, we can answer, "Yes, there is!" It is located 2.2 miles upriver from White's Ferry on the C&O Canal towpath, at Milepost 38.

## The Investigation

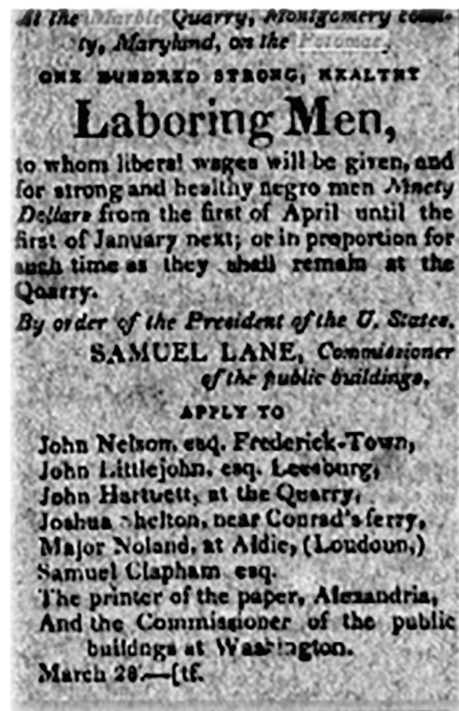
In the April 8<sup>th</sup>, 1817 issue of the *Genius of Liberty*, a local Leesburg, Virginia paper, an advertisement for laboring men appeared.<sup>16</sup>

All of the men listed were important in their communities and many of them had a direct relationship to Latrobe and the rebuilding effort in the capital. For example, according to Eugene Scheel, John Littlejohn was a Methodist minister and sheriff in Leesburg. He was part of the chain that preserved the Constitution and other important state papers which were hurriedly removed from Washington for safe-keeping immediately before the burning in the summer of 1814.<sup>17</sup>

John Hartnett (at the quarry) was an experienced stone mason who was placed in charge of shaping the Potomac marble columns when they arrived in Washington. According to an article in the *National Intelligencer* of January 24, 1817, in June of 1816 Commissioner Samuel Lane contracted with Mr. Hartnett, "an experienced marble mason, for all the columns and pilasters of the House of Rep..."<sup>18</sup>

Most important, though, is Samuel Clapham. The Clapham family were active in Loudoun county for generations, involved in farming, quarrying and canals. Their estate house, named Chestnut Hill still stands just west of Route 15 in northern Loudoun County. It was Samuel Clapham who owned the land leased by the U.S. government in 1817 for the first Potomac marble quarry. In an August 8, 1815 letter to the Commissioners of the Public Buildings, Latrobe identifies Clapham:

There is on the S. East of the Cactoctin Mountain a very large extent of country, which abounds in immense Rocks of Marble, or Limestone *Breccia*, that is of a Stone consisting of fragments of ancient Rocks bound together by calcareous cement, and thus becoming one solid and uniform (homogeneous) Mass of Marble. This Range of Rocks I have traced from



*Genius of Liberty advertisement for workers*



James River to the Delaware, but it appears nowhere of a more beautiful kind than on the Patowmac. A specimen will be submitted to you as soon as I can get it polished.

The largest Mass of this Kind of Rock is situated on the Maryland side of the Patowmac [sic] on land the property of Samuel Clapham, Esq. It overhangs the River, and would furnish without any land carriage *all the Columns of the Capitol of one block each* if required, and of beauty not exceeded in any modern or ancient building.<sup>19</sup>

In February, 1816 the commissioners contracted with Samuel Clapham to quarry the marble.<sup>20</sup> On March 14, 1816, Latrobe sketched the outcrop and titled the piece, “Breccia Marble Rock opposite Clapham Island.”<sup>21</sup> Clapham Island is now called Mason Island and is about 1.5 miles long, with its up-river end directly across the Potomac River from the Marble Quarry campsite mentioned above.

All of this evidence, and more, pointed to the location of a quarry in a 1.5 mile stretch along the Maryland shore of the Potomac River across from Mason Island, but a search by the author in the autumn of 2018 failed to find one.

### The Actual Hole-in-the-Ground

In 2018, while researching the history of Potomac marble, Mary Oehrlein, a historic preservation officer at the Capitol, became an important resource. Among other items, she sent a memorandum dated January, 1965 and written by Owen H. Ramsburg, an engineer employed by the Office of the Architect of the Capitol

(AOC). It was addressed to Mario E. Campioli, the Assistant Architect of the Capitol and the man in charge of restoration of the old Senate Chamber. It reads, “This investigation and report was made in order to find similar marble to be used in the restoration of the Old Senate Chamber.”<sup>22</sup>

In an attempt to locate “similar marble,” Mr. Ramsburg consulted many of the same sources I had used only to find the same ambiguous results. At first, thinking that the Point of Rocks area was the probable location of the quarry, Mr. Ramsburg made multiple visits to the area. In particular visiting Camp Kanawha, a private club, which still exists.<sup>23</sup> Potomac marble samples were taken at the camp and along the nearby Baltimore and Ohio Railroad tracks. In all, three visits were made to this area between October and December 1964 by Mr. Ramsburg and Frank X. Kuhn, a stone expert employed by the AOC. The men remained unsatisfied that the source of the marble columns was there.

The investigation received critical evidence when Ramsburg located Benjamin Latrobe’s article in the *National Intelligencer* from January 24, 1817. In this article, Latrobe writes,

The Potomac, breaking through the Co-tecktin [sic] mountain, crosses the Breccia until it meets the Monocasy [sic] under the S.E. side of the valley; it then suddenly turns to the S.W. and again enters the Breccia, leaving a large mass on the Maryland side (the east side) of the river, by far the highest part of this irregular compound. It immediately however turns



Above – A view of the canal and Potomac from the quarry.

Below – The author at the quarry

Photos by Paul Kreingold





to the S.E. and at Conrad's Ferry (now White's Ferry) leaves the Breccia finally. On this high mass in Maryland, in which the quarry is opened.<sup>24</sup>

Further search in this "high mass in Maryland" above White's Ferry revealed that the land was broken up roughly into two bluffs with a deep ravine between them. A thorough search was made of the area but to no avail. Finally, National Park Service rangers were mobilized in January 1965 and an expedition organized. On February 1, 1965 Chief Ranger Bell of the National Park Service announced they had located the quarry 2.2 miles upriver from White's Ferry.

### Visiting the Quarry

It took two attempts on my part to find Latrobe's quarry despite the specific instructions of the Ramsburg report.<sup>25</sup> The quarry is impossible to see from the towpath when there are leaves on the trees and difficult when there are none. Using an accurate GPS device, walk up river on the towpath from White's Ferry. The river will always be on the left and in a mile or so the farm land on the right gives way to a growing stone ridge. The occasional drill marks in the ridge are from the canal construction and are not relevant to our search. The quarry is located at the top of this ridge at exactly 2.2 miles. Fortunately, the canal is shallow in this area and can be easily crossed but wading boots are recommended. Climb the ridge and enter the quarry. Over fifty years later, it is exactly as described in the report by Mr. Ramsburg:

Some of the sides of the quarry show drill marks as do one or more blocks laying loose in the bottom of the quarry. The south wall or side of the pit is practically solid Potomac marble. The east wall has two to eight feet or more thick seams of the red sandstone of the Newark formation between which are seams of Potomac marble. On the north side, the bottom of the pit, in general, meets the natural slope of the bluff and at the west side the floor of the pit drops off abruptly to the canal below.<sup>26</sup>

Interestingly, during a search along the water's edge in the immediate area of the quarry some marble blocks were found half-buried in the mud.<sup>27</sup> Was this the result of a careless boatman loading the cargo back in 1817 or simply debris scattered from the quarry above over a 200-year period? Further investigation is needed.

### And What About the Loudoun Quarries?

Having successfully located the main Montgomery County Potomac marble quarry, the search for a Loudoun County quarry continues. As I indicated earlier, there are at least two locations which oral history point to as possibilities, but documentary proof is still needed.

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### Notes:

1. American State papers, Class 10, Misc II Image 427, *City of Washington: Progress Made in Rebuilding the Public Edifices, Latrobe Report to Congress*, November 28, 1816
2. Saul K. Padover, ed., *Thomas Jefferson and the National Capital* (Washington, DC: United States Printing Office, 1946), 483, Latrobe letter to Thomas Jefferson, June 28 1817.
3. American State papers, Class 10, Misc. II Image 434, *Abstract of Disbursements* made by Samuel Lane, December 12, 1816
4. Talbot Hamlin, *Benjamin Henry Latrobe* (New York, Oxford University Press, 1955), 444. The story told by John H. Latrobe is reported on page 64 of his biography, *John H. Latrobe And His Times 1803–1891* (Baltimore: The Norman Remington, 1917). The apocryphal nature of the story is that John says that it was at the Clapham estate that his father "saw for the first time the Breccia from which the columns of the House of Representatives...were afterward obtained." However, Benjamin Latrobe in his January 18, 1817 letter to the *National Intelligencer* says, "It is now about 20 years..." since he first noticed Potomac Marble.
5. Robert Kapsch, *Building Washington* (John Hopkins University Press, 2018), 218.
6. William Allen, *History of the United States Capitol* (U.S. Government Printing Office, Washington 2001) 106.

7. Paul Norton, *Latrobe, Jefferson and the National Capitol* (Garland Publishing Company, New York, 1977) 241.
8. Yardley Taylor, *Memoir of Loudoun County Virginia*, (Thomas Reynolds, Leesburg, 1858)
9. *Maryland Geological Survey, Vol. II* (Johns Hopkins Press, Baltimore, 1898), 187–193.
10. Joseph K Roberts, *The Geology of the Virginia Triassic*, (University of Virginia, 1928) Page 130
11. Eugene Scheel, *History of Loudoun's Limestone Overlay District*. Note - the article incorrectly states that Potomac marble was used for the Capital from 1793 to 1817. It was actually used only after the 1814 fire beginning in 1817.
12. Thank you to Master Angler David Crenshaw of Leesburg, Virginia for helping me measure the depth of the pond using his Deeper Sonar device. The photographs were provided to me by Dan Davis, the Education Director of the Loudoun Country Izaak Walton League. He received them in a letter dated March 10, 2015 from Mr. Tom Caviness whose father Jack Caviness was a charter member of the organization.
13. *Building Stones of Our Nation's Capital*, (Department of Interior, Washington DC, 1975), 12.
14. *Building Stones of Our Nation's Capital*, (Department of Interior, Washington DC, 1998), 8.

(Continued on next page)

# Across the Berm – Ed Brown

R. Edwin Brown died at age 99, at his home in Dickerson, Md. on January 26. Ed was known as the owner of White's Ferry, in Poolesville, Md. In 1946 Ed and two partners bought a closed White's Ferry, and he was the main force in restoring operations and eventually became the sole owner. Today, it is the only remaining ferry operating on the Potomac River where at one time there were many ferries operating.

A funeral service was held on January 31 with an overflowing crowd of about 200 people at St. Peter's Episcopal Church in Poolesville, Md. Ed was from the "greatest generation" serving with the 8<sup>th</sup> Army Air Corps posted in England during World War II, where he met his future wife, Winsome, to whom he was married to for over 73 years. Ed was a distinguished lawyer from 1941 to 2019.

Ed was a lifelong member of St. Peter's. He once told me that as a child he would stoke the fire in the church's furnace so the church would be warm for Sunday service. He also rang the church bells as a child, and he was a member of the vestry for 33 years. He was a philanthropist and a long standing of influence in the community. He had numerous friends and loved to tell stories. He was a charter member of the Monocacy Lions Club and had the distinction of becoming the longest serving active member in the history of Lions

International. He helped establish the Upper Montgomery County Volunteer Fire Department, and his hobbies were sailing on his yacht in the Chesapeake Bay and along the east coast, hunting and fishing.

Last year, I gave a talk on the C&O Canal at a Monocacy Lions Club meeting. During my talk, I showed a photo of a flooded White's Ferry and nearby buildings that I took in 2018. Ed spoke up saying, "That's my place!" He went on to tell a story about the time he rescued one of his employees who had gone to bed in the building the night before. The next morning, as the flood waters rose, Ed took his boat over and knocked on the second-story window. The employee looked out the window, saw Ed in the boat, opened the window and climbed into the boat with Ed.

Ed loved White's Ferry and said that it was his favorite hobby. I mentioned the time when, as a Boy Scout, we camped at the picnic area by the river. We played capture the flag and some of us laid down in a patch of stinging nettles. Ed giggled and said he remembered the scouts camping there and the stinging nettles patch along the creek that flows into the Potomac.

– Jon Wolz

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## Potomac Marble Quarries (Continued from previous page)

15. [www.canaltrust.org/pyv/marble-quarry-campsite/](http://www.canaltrust.org/pyv/marble-quarry-campsite/)
16. *Genius of Liberty*, April 8th, 1817. Thank you to historian Edward Spannaus of the Lovettsville Historical Society for locating this advertisement which was reprinted many times in local newspapers.
17. Eugene Scheel, *In Debate About Documents' Hiding Place, A Loudoun Legend Lives On*, (Washington Post, August 18, 2002)
18. *National Intelligencer*, January 24, 1817. Latrobe letter to the editor dated January 18, 1817. Library of Congress Newspaper collection.
19. Edward C. Carter II, Editor in Chief, *The Papers of Benjamin Henry Latrobe, Series IV*, (Yale University Press, New Haven, 1988), 681
20. Benjamin Latrobe, *Letter to Congress*, November 28, 1816 (American State Papers, Miscellaneous, Volume II) 427, "The present Commissioner of the public buildings has, therefore, entered into a contract for all the columns and progress has been made in quarrying them."
21. Edward C. Carter II, Editor in Chief, *Latrobe's View of America*, (Yale University Press, New Haven, 1985), 336. Owen H. Ramsburg, *Report on Potomac Marble* (United States Congress,

Architect of the Capitol, Records, Office of the Curator, Washington, DC, Capitol Stone files, 1965), 1.

22. Camp Kanawha has a six-foot high Potomac Marble obelisk near its gate and uses the stone for some of its chimneys. Except as borders for gardens, this is the only use of Potomac Marble beside the columns in the Capitol that I have so far seen. I am indebted to Dr. George Lewis for guiding me through this area.

23. *National Intelligencer*, January 24, 1817. Latrobe letter to the editor dated January 18, 1817. Library of Congress Newspaper collection.

24. On the successful second attempt I was accompanied by Dr. Roger Biraben of Hillsboro, Virginia who greatly aided me in the search.

25. Owen H. Ramsburg, *Report on Potomac Marble* (United States Congress, Architect of the Capitol, Records, Office of the Curator, Washington, DC, Capitol Stone files, 1965), 1. Although Ramsburg says that there is "no trace of blue overlying limestone described by Latrobe," I did find some scattered on the floor of the quarry.

26. These stones were first noted by Jon Wolz who is a volunteer level walker for the C&O Canal Association and an avid historian.



# The Cumberland

By Rita Bauman

During the 2019 Rails to Trails event held in Cumberland, 1st Sgt., USA (Ret) Ronald and Mrs. DiAnn Lewis visited *The Cumberland* replica canal boat located at Canal Place. Being dismayed at the condition of the boat, 1st Sgt. Lewis contacted Ranger Stephanie Siemek to volunteer to work on its repair. Ranger Stephanie put him in touch with William Bauman of the C&O Canal Association and, after a discussion, Ronald Lewis assumed leadership of the repair work with a budget of \$3,000.00 for supplies. Starting in early October, Ronald and DiAnn worked for weeks, replacing the rotted raceway boards; scraping, caulking and painting the cabin wall; and installing new functional painted shutters and a gutter-board over the windows to help deflect rain. To help with interior ventilation and eliminate leaking, rubber gasketing was installed to minimize the problem. Also, a metal shield was installed at the top step of the entrance ladder after Ronald noticed that a portion of the raceway had suffered accelerated wear and delamination of the plywood due to the foot traffic. They painted the entire hull, the raceway and all three cabins.

Prior to starting this restoration, Ronald asked for additional volunteers, and 15 members of the Carpenters Union Local No. 1541 from Allegany County stepped up to help on Saturday, October 26<sup>th</sup>. Previously, the rudder had been made of several boards laminated together with a band surrounding the boards. To find a single piece of wood that was big enough for a rudder, Ronald visited a Pennsylvania lumber yard. Under his supervision, the new 200 lb. one-piece tiki wood rudder was installed by the carpenters. Additionally, rotted hull boards were replaced, which needed to be cut to fit top and bottom and then to length. The carpenters also replaced the cabin roof tar paper and caulked all the nail heads.

When Ronald was singlehandedly working on a two-man job replacing the breakwater at the bow, a family stopped

by to see what he was doing. One of these visitors, Wyatt Osmond, of New York Carpenters Local 227, stepped in and helped him complete the task.

Ronald, using his persuasive powers, brought the job to completion under budget, at \$2,976.97, and prior to a self-set deadline of "before winter started." The City of Cumberland donated the paint. This job would not have been completed without the hard work and dedication of Ronald and DiAnn Lewis. Also, a grateful "thank you" goes to the members of Local 1541 for volunteering on a rainy October day.

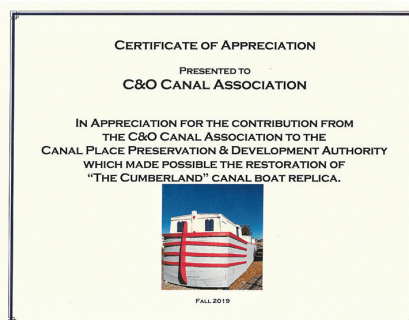
The replica canal boat, *The Cumberland*, has been a hands-on-educational tool used by the C & O Canal NHP for many years, teaching fourth grade students from Maryland's Allegany and Garrett Counties, Pennsylvania's Bedford and Somerset Counties, and West Virginia's Mineral and Morgan Counties. While the boat is owned by Canal Place, the C&O Canal Association has maintained it since 2012.

The original construction of the replica canal boat was done by the U.S. Naval Reserve Seabees Unit RNMCB-23, the Army Reserve, the Sea Cadets, Allegany County Vocational Technical High School students and other volunteers. Master Chief Peter Fraser, a member of RNMCB-23, is DiAnn Lewis' father. John Millar, an Association member since 1979, was the long-time leader of the volunteers. John not only originated the idea of such a boat, but led the volunteers who staffed the boat during the summer for 23 years when

the boat was dry docked at Lock 75. It was dedicated on July 11, 1976 and was featured in the September 1977 *Along the Towpath*.

*Bottom – (l-r) Ronald Lewis works with a volunteer carpenter; installing the new rudder; Ronald and DiAnn with the finished boat. Left – Certificate of Appreciation from Canal Place.*

*Images courtesy of Rita Bauman*





# 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***

## Lift Lock 31: Not Your Ordinary Lock

Every lock on the C&O Canal is unique in multiple ways, and every lock has a story to tell about its construction and its history. But Lock 31 is unique in particularly interesting and complex ways and, as many will walk past it on this year's Douglas Hike, I decided to try to tell its story.

As soon as the Maryland Court of Appeals in the beginning of January 1832 had decided in the C&O Canal Company's favor and against the B&O Railroad concerning the rights to the narrow passages between Point of Rocks and Harpers Ferry, the company prepared to begin construction along that 12-mile section. Contracts were let on February 23, 1832 for the roughly half-mile sections of canal prism, as well as five lift locks (Nos. 28–32), the Shenandoah river lock, 20 culverts, and four waste weirs.<sup>1</sup>

Lock 31 is located at Mile 58.01 at the base of the watershed of Israel Creek, which passes under the canal through Culvert 93 at Mile 58.19. The creek's valley is known today as Pleasant Valley and it is bounded by the Catoctin Ridge on the east and Maryland's Elk Ridge (an extension of the Blue Ridge) on the west. These two ridges end at the Potomac River, creating the upper two of the four contested narrows.

### Industry and Transportation in the Lock 31 Area

On March 17, 1832, Obadiah Gordon was awarded the contract for Lock 31. Also, in 1832 the Frederick and Harpers Ferry Turnpike, passing a short distance north of the lock, was completed in rough form. The B&O Railroad would be blocked back at Point of Rocks by the January Appellate Court ruling until after the May 1833 agreement between the canal and railroad companies under which the B&O would reimburse the C&O for laying out a route through the four narrows for a single track on the canal's berm side. (The railroad tunnels between Point of Rocks and Lander were opened in 1868. The tunnel through Maryland Heights dates to 1894, when a new

bridge across the Potomac was built and the right-of-way through Harpers Ferry realigned.)

In 1832, as the canal was being constructed through this area, the brief industrial village of Weverton that would eventually be created between the canal and the river was still only a gleam in the eye of its ambitious founder, Casper Wever. The Weverton Manufacturing Company (WMC), which was behind the Weverton developments, was organized by Wever and his investors in 1835.<sup>2</sup>

However, when the canal construction began along this section, a mill that both sawed wood and milled grain existed north of the land where Lock 31 would be located. The mill's head race brought water from Israel Creek, while its tail race carried the outflow to the Potomac, passing immediately beside what would be the upstream end of the lock chamber.



*Above – Historical view of Lock 31, with locktender, shanty and passing train – Photo courtesy of the National Park Service; C&O Canal National Historical Park*

*Below – Lock 31 in 2020 – Photo by Steve Dean*



*Along the Towpath, March 2020*



As early as 1821, Wever had begun buying land on the Maryland side of the river in the area of the future Weverton. His initial purchases included a farmhouse and tavern. In 1823, Wever moved his family into the house and began calling his land “Wever’s Mills.” As the canal company was required to provide access across the canal for Potomac River ferries or landowners using the land between the canal and the river, Wever’s land needed a bridge. A swing bridge over the lock that was large enough for wagons and carriages initially served to meet that requirement.

The Lock 31 bridge became a problem for the Frederick-Harpers Ferry toll road. People used the bridge to access the towpath between the lock and Harpers Ferry to avoid the tolls. The locktender was required to keep the bridge locked in its open position when not used for valid purposes.<sup>3</sup> No evidence of the swing bridge remains, and it is likely that it was not needed after the WMC failed and the last business between the canal and river closed.

### Lock 31 Construction Issues

One uncertainty with Lock 31 is its unique connection with that mill culvert and its possible relationship to the sale of canal water to the adjacent mill. Tom Hahn, in his *Towpath Guide to the C&O Canal* states:

As water provided from Israel Creek was insufficient to operate the mill in the dry season, an arched intake from the canal was provided for the mill to augment its water supply by buying canal water. The 6’ span culvert under the lock, which provided for the tailrace from the mill, was undoubtedly built by the contractor of this lock and the cost included in its footings.<sup>4</sup>

In reality, the culvert is not under the lock proper, but is directly behind the breast wall and under the upstream level’s canal floor, bracketed by the upstream wing walls. The cost of placing this culvert immediately proximate to the head of the lock chamber doubtless accounts for the fact that this lock cost around \$4,000 more (total \$16,085) than any other lock below Harpers Ferry.

The C&O Canal Association’s culvert expert, Steve Dean, notes that this culvert was never part of the canal’s culvert numbering system. Almost certainly this was due to the fact that it was not required by the engineering of the canal, but by the proximity of the pre-existing mill and its tail race that necessitated it be a part of the lock’s design.

Also, it should be noted that William Davies points out that on the berm the culvert face is in “a cistern 20 ft. deep, lined with scabbled quartzite.”<sup>5</sup> Perhaps that is what caused Hahn to think the mill could get water from the canal when Israel Creek was low, but it

could have done so only with a pump of some kind to lift the water to the mill works.

The contracts for both Lock 30 and 31 were let to Obadiah Gordon on March 14 and 17, 1832 respectively, and his men began work on 31 in May and on 30 in June. However, the contract for 30 was abandoned in July and that for 31 at the end of the year on December 31. It might be noted however, that Mr. Gordon had completed the construction of Dam 2 in 1830 after an earlier contract with another contractor was terminated and re-let to him. In January 1833 the contract was re-let to John M. Moore whose men recommenced work on it immediately, completing the construction in September.

By late October 1833, all the structures were completed from Seneca (Lock 23, at the Dam 2 guard/inlet lock) up to the Dam 3 guard lock and inlet channel above Harpers Ferry. The canal below Dam 2 had been open since 1831 and now, in a late season trial, the new 38.6 miles of canal was watered and put into use. However, 1834 would be the first full boating season on a C&O Canal that now extended over 62.33 miles between Dam 3 and Tidelock.

### The Purcell vs. Fisk Conflict over the Lock Foundations<sup>6</sup>

Problems with the towpath wall of Lock 31, if they developed almost immediately, may have contributed to an early controversy concerning the locks’ design and their foundation. In any case they certainly exemplify the problem behind the controversy.

In early 1835, Thomas Purcell, a senior C&O engineer and one of the company’s original engineering corps formed in 1828, prepared a revision of the 1829 specification for locks. The changes were initially concerned almost entirely with the foundation and were designed to remedy a significant defect that had appeared in some of the locks. That de-



*The berm side of the culvert under Lock 31 in 2016, showing alignment with the upstream section of the lock – Photo by Steve Dean*

fect was the narrowing of the lock's chamber due to the "tipping" or slumping inward of the lock walls—especially seen in the upper ranks of the masonry at mid-lock.

Purcell's specifications stated that, if a rock foundation could not be obtained, the lock should be placed on a bottom of timber and planking arranged in a complex pattern that he described in detail. These layers would have spaces between them that would be "well rammed and puddled." (Puddling involved the use of clay to create a watertight seal.) That foundation would then be sealed with a layer of yellow pine on top that would be "well jointed & fitted so as to be watertight."<sup>7</sup>

However, in June, Charles B. Fisk challenged Purcell's modification. He asserted that Purcell's plan left the basic cause of the narrowing of the chamber uncorrected. It was an audacious act on the part of the relatively young Fisk who was an 1826 graduate of Yale, where he had distinguished himself in mathematics. However, he had been hired by the C&O in 1828 as a mere assistant engineer with little or no canal engineering experience. Purcell on the other hand was an older and experienced engineer who had worked on the James River Canal in 1826, and the Juniata Division of the Pennsylvania Canal in 1827. In the latter position he served as a principal assistant engineer in the state's ambitious canal system.

Fisk, for his part, explained in great detail what in the foundation's design resulted in the walls slumping inwards, and he offered his own description of how the foundations should be built. His plan would use only timbers and no planking or "rammed and puddled" spaces. Instead he proposed "one foot square white oak timber fitted closely together, and covering the whole foundation."

Fisk described some additional changes and recommended:



Lock 31 walls from the upstream end of the lock, with the concrete-faced shaved stone towpath side wall – Photo by Steve Dean

A batten between the gates of 15/100 of a foot in the chamber of the lock for each wall. — In other words, making the lock as heretofore 15 ft wide at bottom, and 15 30/100 feet at the top. This batten is not continued regularly throughout the chambers, but swells gradually to the center from either end.

Fisk's design, therefore, provided for a slight backward leaning, especially in the center and upper ranks of the layers of stone in the lock wall, slightly increasing the width. As a result, the walls would not be perfectly vertical in the upper center ranks of the chamber masonry.

In July, Purcell countered with his own letter to the board specifically objecting to Fisk's recommendations. In it, he cites a January 21, 1830 report by the New York canal commissioners that stated: "The chambers of some of the locks on the Erie and Champlain Canals have been contracted at the top *by the external pressure of the banks produced by the expansive power of frost.*" [The italics are my emphasis.]

Purcell explained that he believed the effects of freezing moisture behind the lock walls was a partial cause, but one related to the foundations—especially when they were laid on a loose or sand base. Essentially he settled on the belief that "the 'lightness' of the walls and the action of the frost and water upon them caused the narrowing." By "lightness" Purcell referred to the fact that the lock walls were only one stone wide and were backed only by rubblestone, although the width of the stones was greater at the bottom of the wall and less wide toward the top.

Fisk continued to believe that the core of the weakness was related to the foundations. By the end of 1835, the differences between the two men remained unresolved. After a conference, they wrote to the canal company president and directors, and advised them to so frame future specifications for locks "as to meet the views of each" and "to permit in the execution the use of either mode of construction now proposed." Three months later, in March 1836, Purcell resigned and on April 1, 1837, Fisk was appointed chief engineer. At that point he was the "last man standing" of the C&O Canal Company's large original corps of engineers.

### Lock 31's Towpath Wall Problem

Lock 31 was built on a wood foundation fitting the earlier specifications. It is clear that the towpath wall of this lock in particular tended to slump inwards. As Fisk mentioned in the exchange of documents, the canal company addressed the problem by shaving off (i.e. cutting back) some of the facing stone in order to maintain the width required by the boats. Reports exist of boats that were being raised in a lock getting caught in the upper ranks



of stone when they were no longer far enough apart for the boat to rise freely.

Purcell, in his correspondence on the 1835 controversy over the narrowing of the lock walls, gave an example, writing: “This defect [of the lock walls narrowing] I first detected at Lock No. 3 of this canal (which is located in Georgetown) in the year 1833 [when] a large scow nearly 15 feet wide was passed into the Lock from the lower level, and in ascending to the upper level got fast between the walls which form the sides of the lock chamber.”

In the case of Lock 31, the cutting back or shaving of the towpath wall stone was done to the point where it weakened the wall and resulted in it being replaced with concrete. On the river-side of the towpath are what are likely stones removed from the wall when it was converted to concrete. As there is no evidence for concrete being used in such a manner to repair or rebuild canal structures prior to the Trusteeship Era (1890–1938), that change was likely done sometime after 1890. Because the concrete was done in three vertical pours, pockets developed in the seams between the pours that would have allowed leakage into the fill behind the wall.

While a faulty foundation and the winter freezing of moisture behind the towpath wall might account for the wall’s weakness, one must also consider the possibility that the stone itself was at fault. Stone for this lock was obtained from three sources: (1) a hard white flint stone quarry four miles away in Virginia; (2) a quarry ½ mile from the lock on land owned by Casper Wever; and (3) a granite quarry in Virginia one mile away by land and 1 1/2 miles by water.

A further peculiarity may well have been due to an error when measuring the total width of the three molds into which the concrete was poured. As Hahn reports, the towpath lock chamber measures only 89 ft. 11 inches, while the original masonry berm chamber measures 90 ft. 1 in.—which would make the towpath side 2 inches shorter than the berm side.<sup>8</sup> In any case, the lock chamber being within an inch or two of 90 ft. puts this lock into the group of around a dozen other locks with chambers less than 91 ft. in length.

I must pause at this point to address again the issue of boat length vs. lock chamber length. It boils down to this: despite registrations and reports of C&O Canal boats of 92 ft. or more, such boats would not have fit into the locks having only 90–91 ft. chambers. Actually, the problem here is even greater: A boat entering a 90 ft. chamber (+/- 1 inch), must not entirely fill the space between the point of the closed downstream miter gate and the hypotenuse of the miter sill for the upstream gate (or the breast wall when the upstream gate is a short gate on top of the breast wall as is the case for the locks in the lower canal). It simply is not possible to snub

a 22-ton empty boat, let alone an up-to-150 ton loaded boat, so tightly that there is none of the longitudinal movement between the gates that is caused by the turbulence of water pouring into the lock from upstream or out of it at the downstream end. This is especially true because the snubbing rope must be taken in or let out as the boat is raised or lowered.

If a boat does move longitudinally in the lock chamber, there is the real risk that it will hit the gates at one or both ends. This could readily break them and/or seriously damage the boat. Accounts testify to the effect of such damage, which results in the closure of that part of the canal until the necessary repairs were made and/or the boat removed from the lock. Consequently providing some “wobble room” between the gates and the bow and stern, is essential.

Lock 31 would clearly have challenged snubbers of canal boats that fit tightly in it. Its troubled towpath wall also suggests a foundation problem that would, within two years of its construction, divide the canal company’s engineers. And the lock’s upstream end certainly presented an utterly unique design problem to the engineers and contractor. In sum, this lock is anything but typical.

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#### Notes:

1. Unrau, Harlan D. *Chesapeake and Ohio Canal Historic Resource Study*, p. 197 (Available as a free, searchable pdf at: [www.nps.gov/parkhistory/online\\_books/choh/unrau\\_hrs.pdf](http://www.nps.gov/parkhistory/online_books/choh/unrau_hrs.pdf)).
2. See the booklet by Peter Maynard. *Weverton: A Failed 19<sup>th</sup> Century Industrial Village*. Brunswick Historical Press, Brunswick, Md. 2001.
3. Hahn, Thomas F. *Towpath Guide to the C&O Canal*. Revised edition, p. 112 (Harpers Ferry Historical Association, 2015).
4. Ibid. p. 113. Documentation for this statement has not been found and while the culvert is evident the mill’s ability to use canal water is questionable.
5. Davies, William. *The Geology and Engineering Structures of the Chesapeake and Ohio Canal*. This unfinished work, which includes handwritten notes and diagrams on pages that also have printed text, is available as a free pdf that is somewhat searchable (excluding the handwriting and diagrams) on the C&O Canal Association’s website at: [www.candocanal.org/histdocs/Davies-book.pdf](http://www.candocanal.org/histdocs/Davies-book.pdf).
6. This discussion of the foundation controversy is drawn from the “Interim Report RE ‘Four Locks’” by John F. Luzader, June 10, 1961; Branch of History, National Park Service; and from the June 1978 Historic Structure Report “Chesapeake and Ohio Canal: The Masonry Locks” by Harlan D. Unrau.
7. The discussion of the foundation problem is drawn from “Interim Report RE ‘Four Locks’” by John F. Luzader, June 10, 1961; Branch of History, National Park Service; and from the June 1978 Historic Structure Report “Chesapeake and Ohio Canal: The Masonry Locks” by Harlan D. Unrau.
8. This information appears only in earlier versions of Hahn’s *Towpath Guide*.



# My Final Level Walk

By Don Juran

On Nov. 21, 2019 I completed my 25th and final walk of Level 25, going back to 1994. (In case you think I can't add, I missed 2017.) This quarter-century of activity has given me much enjoyment and a sense of pride. At age 78 I can still manage four miles carrying a day pack, but I'm no longer nimble enough to descend into the prism to retrieve trash. Let the youngsters take over.

I can't remember who assigned me Level 25 back then—it was way before Karen Gray's tenure—but it was a perfect fit. The level is about five miles upriver from Sandy Hook, a mere 45 minutes from my Rockville home and easily accessible, with a big parking lot at Dargan Bend. The towpath is not heavily traveled, but it's far from deserted, and I've had some fine conversations with pedestrians and bicyclists, many of whom thanked me for my efforts.

Over the years I walked sometimes alone, sometimes with my wife Carol and with

all three children, now well into adulthood, all now having a love of hiking which will be passed to my grandchildren. Quite a legacy, that.

My last walk was on a weekday in late fall, and I shared the towpath with only four bicyclists, unless you count a fishing boat in the river. My thoughts turned to how I will miss sitting on the Lockhouse 37 doorstep and munching my

peanut butter sandwiches, the different views at each season, the fresh air and, most of all, hearing no sound but my own footfalls. The late Hal Larsen said it best: "Only two things cannot be improved upon: vanilla ice cream and silence."

My thanks to Steve Dean, the late Bill Burton, Karen Gray, and all the other Level Walker chairs who gave me encouragement and support during my tenure.

*Thank you, Don, for your 25 years of service to the C&O Canal NHP and the C&O Canal Association.*



*Lock 37, Don's preferred lunch break spot, won't be the same without him – Photo by Steve Dean*

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## C&OCA Welcomes New Members

By Will Stewart

***Joseph & Jane Brookreson, Martinsburg, W.Va.***

***Louis Craig, Seattle, Wash.***

***Kathleen Fulcomer, Laytonsville, Md.***

***Robert Jacobs & Barbara Ryan, Silver Spring, Md.***

***Kevin Kearny, Cabin John, Md.***

***Paul Kreingold, Leesburg, Va.***

***Ron & DiAnn Lewis, Cumberland, Md.***

### A Note about Membership Renewals:

Is your Association membership current? Check the "Membership Expires" section on your address label on the last page of this issue to see when your membership expires (all Association memberships expire December 31 of the year listed). If the date on yours is Dec. 2019, would you please send us your renewal today? You can download a paper renewal form on our web site at [www.candocanal.org/2020renewalform.pdf](http://www.candocanal.org/2020renewalform.pdf), or renew online at [www.candocanal.org/renew2020.html](http://www.candocanal.org/renew2020.html). Renewing your membership will make sure you continue to receive *Along the Towpath* after this issue. If you ever have any membership questions, please contact Will Stewart, Membership Chair, at [membership@candocanal.org](mailto:membership@candocanal.org).

# Ten Years of Level Walking

By Paul Petkus

In the summer of 2009, I sought out a way to formally help the park after assisting three stranded bicycle riders during one outing. That outing inspired me to investigate opportunities to officially volunteer for the park rather than informally assist. I decide to sign up as a level walker. My first level walk was on September 20, 2009.

Hancock used to hold a festival called Canal Apple Days in September. In 2016, it got moved to May. Sadly, it got canceled in 2017 and hasn't been held since to my knowledge. The festival included arts and crafts booths and food vendors. It also included a parade through town. Prior to my first level walk, I participated in the parade. I was invited to join the bike patrol after I stopped to chat while they were preparing for the parade. It was a great introduction to the volunteer community.

I've monitored Level 49, which is about three miles upstream of Hancock, for ten years. For the past eight years I've also monitored a second level, Level 55, which is about five miles downstream of the Paw Paw tunnel. One of the responsibilities of a level walker is to be an extra pair of eyes for the understaffed National Park Service (NPS). Of particular interest to the NPS is the reporting of safety hazards and changes to park structures. Over the decade, I've reported many trees that were downed after storms. I've also reported a sinkhole on the towpath after a winter storm. In my experience, the NPS has been quick in addressing safety issues. Most of the structures on Levels 49 and 55 have been stable over the past ten years, but Culvert 208 has suffered storm damage. Fortunately, it's not a safety concern.

Level walking never gets to be the same old routine. There's always something interesting to see. During the outing that included my ten year anniversary level walk I encountered a flock of turkeys that crossed the towpath in Level 50. Well, one of them decided to rest on the towpath. It's the one on the left in the photo on the right. The other turkeys hung around in the grass, possibly foraging. I slowly moved closer, getting 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. They all moved into the woods after that.

When I first started level walking I could identify very little of the flora and fauna I observed during my outings. I joined Marion Robertson's wildflower walks to learn how to identify them. I've been learning about dragonflies through the nature walks Steve Dean leads. I participated in a five year long

reptile and amphibian survey in Maryland which was instrumental in helping me learn about them. I learned about butterflies by participating in surveys in Howard County. That resulted in me leading annual nature walks along the canal focusing on them. It also didn't take long for me to figure out that I could take photos and then use resources at home to try to identify things after the fact. I've learned a lot and yet there is so much more to learn. I look forward to continuing to do that during future outings.

A lot has changed in ten years. I often park in Hancock and then travel to Level 49 from there. I've seen a number of good additions along the towpath in Hancock in the past decade. New directional signs have been added for the section of the Tuscarora Trail that follows the towpath through Hancock. A Kids in Parks interpretive sign was added. Canal Mobile Tour signs encouraging visitors to learn about the canal's history in Hancock have also been added. A bench was installed by members of the Association's Volunteers in Parks (VIPs). On the levels I survey, the VIP's replaced the signs at Lock 53 and Lock 60. They also cleaned the interpretive signs in front of the cement mill on Level 49.

Ten years ago, Hepburn Orchards was open on the edge of Hancock. I liked to go there for the fruit and the fresh baked pies they sold. Unfortunately, the owner developed health problems and the business was closed. The property was sold at auction. The new owners built a replacement facility they named Blue Goose Market. Apparently they knew what worked for Hepburn Orchards, so they also offer fresh baked pies. Their pie slices have helped fuel many of my level walks since they've opened, and will continue to do so.

*Thank you for your service as a level walker, Paul. We look forward to many more years of your support as a level walker!*



Top – Turkeys on the towpath  
Middle – Hepburns Orchards  
Bottom – Culvert 208  
*Photos by Paul Petkus*



# On the Level

By Steve Dean

## November, 2019 through January, 2020 Activity

*Level 5 Lock 14 to Bridge at Croyley:* **Jim Heins reports Dec. 27:** It was a great day to be out on the towpath; somewhat overcast but pleasantly warm. There was a large number of bike riders and walkers. There were numerous small birds but no large ones. I found very little trash. There was no water in the prism. **John N and Frances M Maclean report Jan. 25:** There was more water than usual in the canal on account of the rain, and it was also dirty. There wasn't much trash, but the bagged dog waste that was apparently tossed with deliberation off the towpath was disgusting. The towpath was in pretty good shape, but muddy in spots on account of recent rain.

*Level 7 Great Falls Tavern to Lock 21:* **Nancy Benco and Iris Garrelfs report Jan. 2:** Two NPS personnel were conducting a survey of the mudflats directly north of and adjacent to Lock 21; they said NPS planned to clear out canal bed at that point. Towpath conditions were good along the stretch, with the exception of a long-standing muddy stretch just south of the Rockville water plant. With my birding expert at hand, we spotted the following: black ducks congregating with mallards; several great blue herons, red bellied and downy woodpeckers, a nuthatch, a ruby crowned kinglet, a slated junco; and we heard a red tail hawk in the distance. We noted two small floating mats in the canal prism just south of Swains Lock (possibly water hyacinth or water chestnut—both invasive plants).

*Level 10 Seneca Aqueduct to Milepost 25:* **Monica Hanna reports Jan. 1:** The level was a beautifully serene place to spend some time. I encountered two men fishing from the Seneca Creek Aqueduct. A family picnicked in the adjoining picnic area. On the upstream trip along the towpath I passed several hikers and bikers, including two women with a small toddler; they were headed by a man driving a small black pony from a small cart! I encountered only five muddy areas. This level included some yellow painted stones in the middle of the towpath. Perhaps they were marked for removal or as hazards. Thankfully, trash was almost nonexistent. I removed a pound of partially melted beer cans and amber colored bottle pieces from the picnic area fire ring.

*Level 12 Sycamore Landing to Edwards Ferry:* **Ray Abercrombie, Elizabeth Dame, Pat Hopson, Carol Ivory, Tom and Linda Lightfoot, Margaret Neuse, Ron Wise, and Frank Wodarczyk report Nov. 16:** It was a cold day, so it's not surprising that few walkers and bicyclists were out. The biggest change is that there is a recently-installed bench just downstream from Edwards Ferry, one of those funded by the Daofeng and Angela Foundation and no doubt installed by Jim Heins and his trusty crew. We're glad it's there! The Jarboe store ruins and the lockhouse both appeared in good condition. But I noticed today that bricks have fallen from the Jarboe store in at least three locations. Frank reported that the towpath is in good shape all along this level. He removed lots of branches from the pathway for the benefit of bicyclists.

*Level 13 Edwards Ferry to Harrison Island:* **Ron Tipton reports Dec. 24:** The towpath was in good condition; the new gravel surface has settled nicely. The canal between Miles 31 and 32 was mostly watered and had a great deal of lush aquatic vegetation. There was a great deal of ice in the canal above Mile 32 all the way to White's

Ferry. There was only a very small amount of trash along the towpath itself. **Liz Wagner reports Jan. 1:** There were more walkers than usual, probably due to the New Year Day holiday and good weather. The towpath path was resurfaced with a gravel top surface about a year ago. The surface is in good condition. Some areas had fresh horse tracks, but these seemed to be temporary until the next rain. There were no obstructions and some vines on the trees next to the towpath had been cut. There were a few small and medium branches on the towpath, and these were cleared off to the side during the visit. Most of the prism had water in it. The water in the top section between Miles 32 and 33 was clear with no vegetation and clear of debris; the lower section had less water and grass-like vegetation. No areas of the towpath had standing water but sections of the land between the canal and the Potomac were waterlogged. The Lock 25 house was being re-roofed. The cedar shingles and roofing materials were beside the house.

*Level 15 Whites Ferry to Lock 26:* **Jon Wolz reports Dec. 3 (with Steve Hovarth) & Jan. 24:** In December, we noted that the towpath resurfacing project for this level had been completed and the towpath surface was firm and smooth. There were virtually no leaves on the towpath as compared to early November when most of the towpath was covered with leaves. We removed several small branches as we walked. We took a good look at the culverts on this level during this walk. In January, it was a quiet walk, with a couple walkers but no cyclists. Along White's Ferry Road near White's Ferry, there is a point where trash and yard waste are illegally dumped.

*Level 16 Lock 26 to Monocacy Aqueduct:* **Jon Wolz reports Dec. 5 & Jan. 15:** I noted three Frederick County school buses in December at Monocacy. The Monocacy River level was high and the land mass that was on the down river side was underwater. The biker dismount signs have still not been replaced and one of the signs has been gone since December 2017. The other one has been down since June 2017. Another very large branch had fallen from the giant maple tree at Lock 26. I would say it is not a good idea to stand too close to the tree. In January, there was standing water in the prism and along the river side next to the towpath from Milepost 42 down to the waste weir. There is a leak at the usual place, Mile 41.25, with water flowing from the towpath wall. More trees in the area had been chewed by beavers and a few trees where they chewed had fallen over. **Mike Cianciosi reports Jan. 25:** The logjam in front of the Monocacy Aqueduct was gone. There was a storm that morning, so the water level was high and the water color was brown. The towpath re-surfacing is complete along the entire level. The new surface looks good. It drains well, as there were no ruts or puddles at all, even though 1.2 inches of rain fell the previous night. I inspected the four culverts on this level. Culvert 69 had some graffiti painted on the berm side on the concrete portion of the arch and just inside the barrel. The tree blocking the berm side of Culvert 65 is gone. The other two culverts were unchanged.

*Level 17 Monocacy Aqueduct to Nolands Ferry:* **Earl Porter reports Oct. 23, Nov. 21, Dec. 18 and Jan. 23:** As always, trash on this level is an issue, especially at Nolands Ferry and the Indian Flats



camp. (*Thanks for your monthly efforts to control this situation, Earl.*) The Monocacy Aqueduct arches progressively cleared out and in December and January were mostly clear. In November, 96 students led by six adults were present at Monocacy from the Frederick County school system; students were again present in December. Additionally, a photographer was shooting photos of a model on the aqueduct in November.

**Level 19 Point of Rocks to Catoctin Aqueduct: Don Peterson reports November, December and January:** The towpath was monitored over numerous walks. Conditions are generally good on both levels, and no significant issues were reported. **June Miller, Anastasia Miller & Cathy Guzauskas report Dec. 26:** We took a walk on the towpath on a nice, clam day with our dogs Gracie and Garnet. There was a tree crew of five people working on trimming trees. There were puddles on the towpath and it was a bit muddy. The Point of Rocks parking area and boat ramp was very clean, though we found trash on other parts of the level. **James Spangenberg reports Nov. 22:** Towpath condition was good. However, there was a lot of trash – one of big bags of debris, bottles and cans in the canal prism and in the area next to the towpath. The vast majority of this trash was in the prism near the Point of Rocks parking area. The Catoctin Aqueduct appeared to be in good condition.

**Level 20 Catoctin Aqueduct to Lock 30: Doug Zveare reports Nov. 27:** Because it was Thanksgiving eve there were fewer cars in the Brunswick MARC lot. Towpath conditions were good. This level is partially watered in sections, with many downed trees in the canal prism. A substantial amount of English Ivy is choking many trees. The detour bridge at the breach at Culvert 82 is in good shape. Bikers are still ignoring the dismount and walk across signs.

**Level 21 Lock 30 to Lock 31: Doug Zveare reports Jan. 28:** The new towpath surface looks good, and has increased bicycle usage. Of over 20 that I encountered, not one sounded a verbal warning or rang a bell to announce their approach. I recovered only trash along the towpath. Trash in the prism and in woods along the towpath, especially near Brunswick and Sandy Hook, was extensive. I visited four culverts along this level; they have issues to various degrees.

**Levels 21 and 22 Lock 30 to Lock 33: Tom Crouch reports Nov. 26; Dec. 7 & 28; Jan. 13:** During a sunny November walk I encountered several walkers and bikers, and picked up a heavy concentration of trash in the prism a quarter to half a mile upstream from Brunswick. During the December and January walks, the trash situation in the area just above Brunswick continued, with large quantities of trash recovered in that area on all three dates. In January I found a very large fallen tree completely blocking the towpath downstream of the Route 340 highway bridge. As I started back toward Brunswick, I encountered park staff driving upstream in their truck. They continued upstream, found the tree, cut it up with their chain saws and cleared the towpath. The new towpath surface on these levels is holding up quite well.

**Level 22 Lock 31 to Lock 33: Karlen Keto reports Jan. 15 & 20:** The weather was very pleasant on the first walk; I should have left my coat in the car. The towpath is in great shape and no hazards were noted. On the second walk it was very cold; too cold to take my dog Chessie. It was bright and beautiful, however. All appeared well at Lock 31. I walked the towpath until my fingers got too cold and only saw one piece of trash. I only picked up one partial food wrapper. I did note lots of horseshoe tracks that dug up some of the towpath surface.

**Level 23 Lock 33 to Dam 3: Arthur Tsien reports Dec. 22:** The recently resurfaced towpath looks great; no puddling despite recent rains. The canal prism looked good. As I expected and was publicly announced, the footbridge to Harpers Ferry was closed (gate at the top of the stairs was locked) due to the railroad mishap the prior day. Heavy equipment was visible across the river from just downstream of the bridge. Dangling rail cars had been removed; there was no sign of them.

**Level 24 Dam 3 to Dargans Bend: Meredith McCulley reports Jan. 17:** The towpath itself was in excellent condition. I removed numerous small branches from the entire length of the level due to previously windy conditions. The prism was watered to varying degrees in some areas but unwatered for the most part. I did not observe any breaches. I did retrieve debris from dry areas of the canal prism

**Level 25 Dargans Bend to Lock 37: Don Juran reports Nov. 21:** A layer of crushed stone has been placed atop the towpath, making it much more even and easy to negotiate. The towpath was completely dry. The erosion around the culvert at Mile 65 is no worse, and the detour completely crosses the prism. The vegetation covering the bank is higher. All the leaves were down except for beeches and a few red oaks. Three trees on Mile 65 have been felled by beavers; only stumps were left. After 25 years it's time to retire. It's been a wonderful experience, and I'm grateful for the chance to have done it. I will miss it. **Brigitta Shroyer and Joel Anderson report Jan. 18:** We did an extensive clean-up at the Dargan Bend area. It was cold and began to sleet while we were there. Towpath conditions were very good on the new gravel surface.

**Level 27 Antietam Aqueduct to Lock 38: Steve Dean reports Nov. 23:** The new towpath surface was in good condition. Culvert 103 has tree debris built up in the inflow that is an issue that could restrict flow during high water and a sink hole in the prism that is progressively increasing in size. Culvert 104 was recently repointed and looked great. Culvert 105 has a sink hole in the prism that has not recently changed. **Ben, Jennifer, Holly and Zoe Helwig report Jan. 12:** It was an unseasonably warm day on the towpath. It seemed like there was more trash than normal. The towpath was quite active with visitors and there were numerous dog walkers; only one dog was off leash. We noted beaver activity around the railroad trestle. **John and Joyce LeFebure report Jan. 23:** The towpath itself was quite clean, but near Mile 72 on the berm side of the prism are 4 car tires, apparently thrown from Canal Rd. There were very few visitors on a quiet mid-winter day. One hiker geared up for backpacking said he was tuning up to hike the Presidential Traverse in the White Mountains of New Hampshire.

**Levels 28 and 29 Lock 38 to Snyders Landing: Clifford Smith reports Nov. 19:** It was a beautiful day to be on the canal. Towpath conditions were good, with lots of leaves, twigs and small branches (no surprise). I encountered five cyclists. All were reluctant to give any kind of warning when coming up from behind and seemingly under the impression that they could do the whole canal in 2.5 hours.

**Level 31 Lock 40 to Marsh Run Culvert: Elaine Stonebraker reports Nov. 24:** The prism at Taylors Landing has been cleared of sumac and other plants; it looks good. The canal prism was quite dry. There were quite a few walkers and dog walkers out. Large items of trash remain in the floodplain near Milepost 80.

**Level 34 McMahons Mill to Opequon Junction: Trent Carbaugh reports Nov. 25:** The towpath was in good shape; a few sticks down and a few of those wonderfully large and slippery hedge apples were

lying about. The prism was dry, even in the locks, and looked in good shape. I saw a few fox squirrels and numerous deer tracks.

*Level 37 Falling Waters to Lock 44: **Jim Tomlin reports Nov. 26:*** The towpath surface was outstanding – not dusty, not wet; just a little moist. I started and finished at Lock 44. I repainted Mileposts 99, 98, 97, and 96. I wanted to do 95 too, but I ran out of day light. These mileposts were in the intermediate decay state, where the paint was flaking but was still fairly well stuck on; so, it took a lot more time and effort to scrape and wire brush the loose paint.

*Level 42 Four Locks to McCoy's Ferry: **Jack Ebersole reports Nov. 11:*** It was a beautiful fall day; sunny and bright. The towpath is in good condition: completely dry, no ruts or limbs, and covered with leaf litter. The watch house and mule barn structures need some attention. The wall around the porta-potties at McCoy's Ferry is coming loose and a good wind may blow it over.

*Level 45 Ernstville to Licking Creek Aqueduct: **Dennis Kubicki reports Dec. 28:*** It was a great day to be on the towpath! Considering how nice a day it was, I would have thought that I would have encountered more people. The towpath on the level continues to remain in relatively good condition after the resurfacing that occurred two years ago. The good condition has been facilitated to a degree by the lack of any significant rain in this area. As noted previously, vegetation (mostly weeds) is increasingly appearing to take hold in the middle of the path. At this time of year, almost all the vegetation is dormant. What was most striking during this walk was the visibility of all the dead trees. These images are, to a large extent, hidden when the foliage is green and lush later in the year. Because of the lack of rain there was almost no standing water in the canal. What was there was, in some locations, coated with ice. The un-watered locations were muddy. There was much deadfall throughout the level as a result of recent periods of intense winds.

*Level 46 Licking Creek Aqueduct to Little Pool: **Bert Lustig and Patricia Graybeal report Nov. 29:*** Towpath conditions were very good, with some small downed branches. About half the level was partly watered, with lots of downed trees in the prism. We saw wild turkey and turkey tracks on towpath. Towpath use was light, with one fisherman in a kayak at Little Pool.

*Level 47 Little Pool to Hancock: **Lisa Hendrick and Jim Hutzler report Jan. 12:*** We took advantage of a Spring like Sunday afternoon in mid-January and walked the level. Temperatures were in the low 60s and we saw two people returning from a bike ride. The hiker-biker camping area had no litter and showed evidence of a recent fire in the fire pit. The towpath was in excellent shape and with very few limbs, but we did gather the usual litter near the Little Pool fishing area. We also found a few bottles and cans in the wooded area between the towpath and the Potomac River brought in by floodwaters.

*Levels 47 and 48 Little Pool to Round Top Cement Mill: **Phillip M. Clemans reports Dec. 7:*** It was clear and crisp out, with starting temperatures in the low 20s. There was quite a bit of fishing related trash in the canal prism in town; the water was low, and I was able to get to it. I managed to get in quite deep mud doing that. The continuing fishing trash situation in town is an aggravation. I noted new graffiti on the US-522 bridge. The Round Top Cement Mill had plastic over it. Plant life was dormant, but the nature highlight was an active pileated woodpecker at Milepost 125 and several hairy woodpeckers.

*Level 54 Lock 59 to Lock 60: **Dennis Kubicki reports Nov. 26:*** The weather was perfect for a level walk. It was sunny and bright, and the temperature was just right for comfort. From Little Orleans to Mile 145 the towpath was in generally good condition. From there until Lock 60 I observed a significant level of degradation. In many locations there was deep rutting and pits. In other places there was standing water of varying extent. In other places the towpath was in good condition. I noticed a significant amount of additional loss of integrity of the embankment at Culvert 207. The prism varied considerably. In some locations, there was no standing water: only semi-dried mud. In other locations the water level was shallow.

*Level 56 Culvert 208 to Lock 61: **John Wiggins and Kathleen Moriarty report Nov. 24:*** We noted a few small potholes and muddy spots throughout, but overall conditions were good. We finally made it down to Culvert 208 and noted it was in poor condition. We observed numerous birds on this walk – ravens, geese, crows, red-tailed hawk, cedar waxwings, five different woodpeckers (pileated, red-bellied, downy, hairy, yellow-bellied sapsucker), and many smaller songbirds.

*Levels 56 and 57 Culvert 208 to Lock 63 1/3: **Barbara Sheridan and Pat White report Nov. 23:*** We were very pleasantly surprised with how clean everything was. We were really glad to find that Outdoor Club Road was open again. Our biggest concerns this trip were the tree debris (some branches up to 2 inches in diameter) and the many large potholes. The canal was probably the driest we've seen it, although there was evidence of recent storms (substantial tree debris and large sunken puddles on the towpath). The causeway across the canal to Twigg Hollow had absolutely no water near it. The canal was so dry, we could have walked across the prism.

*Levels 59 and 60 Tunnel Parking Area to Town Creek Aqueduct: **Trent Carbaugh reports Jan. 12:*** The weather was good; sun and a few clouds, though the wind was strong at times. Temperature was in the upper 50's. All structures looked good with a little more debris buildup than normal at the waste weir. I saw no animals other than a few birds, but many deer, raccoon and opossum tracks. Purslane Run Hiker/Biker had lots of raccoon and opossum tracks, they may be habituated to this area looking for food as it seems to be a high use hiker/biker. Numerous sticks and limbs were down on the towpath along the entire length of the level. I saw no other people on this level. It was a very nice day to be out.

*Level 61 Town Creek Aqueduct to Lock 68: **Trent Carbaugh reports Dec. 8:*** Other than some small limbs down towpath was in good shape. There is possibly a fisher living in a burrow in the dam at the east end of Lock 68. Unfortunately, there were no clear tracks, but the unclear ones were the correct size and shape. I did detect the distinctive mustelid musky odor when I stuck my head into the burrow to see if I could see anything (I suffer from an excess of curiosity). I saw a young beaver on the berm side of the canal who saw me and took off running to get to his den on the towpath side about 200 feet ahead of where I was. We had a race – I wanted to get close enough to get photos and he wanted to be in his den. The beaver was accelerating, comically, with his feet scrabbling in place, until he got some traction, ran across the thin ice, did a well-executed leap into the air and dove into the clear water around the den. I, of course, was still trying to get my camera out of my jacket, stashed there to keep the battery warm, not fall off of the bike, and keep from laughing too hard, none of which worked.



# Lockhouse 75 Volunteer Support

By Steve Dean

The Association plans to staff Lockhouse 75 during the late spring and summer season in 2020, and this is your chance to participate in a unique and rewarding volunteer activity. Lockhouse 75 volunteers staff the house from 10 a.m. through 4 p.m. on Saturdays, Sundays and holidays between Memorial Day and Labor Day. Duties include opening and checking the house, greeting park visitors, discussing the function of the lock and life on the canal, guiding visitors through the interpretive displays in the house, writing a summary of the day in the lockhouse log, and securing the house at the end of the day.

The requirement to staff the lockhouse in pairs no longer applies, and participants can once again work on a solo basis. As an added safety measure, volunteers will also be provided a park radio along with the key. The radio will

only be needed in the event of an emergency, and a radio use cheat sheet will be provided. As with any volunteer activity on the park, participants will need to complete a National Park Service volunteer service agreement and receive a short brief on park safety and NPS regulations. A uniform is not required, but volunteers should wear their Association badge or other identification as a park volunteer.

Lockhouse 75 is the uppermost lock on the canal and is located near Cumberland. It's a wonderful area to spend a day, and many previous volunteers return year after year. Park visitors appreciate the experience to visit a lock house and frequently comment on the positive experience

If you are interested in volunteering, please contact Steve Dean at [level-walker@candocanal.org](mailto:level-walker@candocanal.org).



*Lockhouse 75 in late summer – Photo by Steve Dean*

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## Volunteers in Parks

By Jim Heins

Getting itchy to get back out into the park? You are in luck. Opportunities abound.

**April** will be the jumping off point for –

- The 32<sup>nd</sup> annual Potomac River Watershed Cleanup, which will be held on Saturday, April 18. There are a bunch of sites within the C&O Canal NHP from Carderock to Rileys Lock which are run by the VIPs. Three hours of helping to pick up trash from the canal to the river – how can anyone refuse such a delightful way to get out AND do some good! All that is required is the willingness to spend several hours on Sat., April 18 from 9 a.m. to 12 p.m. at one of our sites picking up trash and doing some trash talk. If you are willing to help, you need to contact Jim Heins to find and sign up for a site
- Challenging the Garlic Mustard that is trying to take over our lovely park. If the weather cooperates, there will be a few group “pulls” scheduled and we still look for folks to sign up to clear a section of the towpath. To get involved in the Garlic Mustard Challenge,

you can contact either Jim Heins or Steve Dean for more information or wait to see scheduled dates via one of the Association's news/information emails.

**May** will hopefully provide us with the opportunity to continue our stewardship at Swains, clean up the area around Milepost 0 at Tidewater, build some more picnic tables and install them and likely find excuses to do other fun things up and down the canal.

Of course, all of these projects goes better if there are enough volunteers to help.

Other opportunities will show up through one of the emails or on the Association website. If you can't wait until

April, let me know and maybe we can come up with an activity like diving for lost picnic tables in the Potomac; just don't expect me to join you. If you have an idea of some way to help improve the overall condition of the park, let me know.

Contact Jim Heins about the VIP program at [vip@candocanal.org](mailto:vip@candocanal.org), or Jim or Steve Dean about garlic mustard at [gmc@candocanal.org](mailto:gmc@candocanal.org).



*How to (not) clean a picnic table – Photo by Jim Heins*

# Nature Notes

By Marjorie Richman

## Very Odd Flowers

Spring is almost here. By the time you receive this newsletter you can be assured that the flower people (you know who you are) have their guide books at the ready, anticipating another season of colorful flowers, showy blossoms of all shapes and sizes, and delicate aromas. I'll wager nobody is thinking of the many oddballs that appear in the spring, plants without vibrant colors, without blossoms, and definitely without aromas. Yet each of these unusual plants has won the evolutionary game of survival. There must be reasons why these plants continue to thrive.

One such plant is called duckweed (*Lemna minor*). Duckweeds live in still or slow moving bodies of fresh water, typically in dense populations. They are usually seen as a green mass floating on the surface of the water, looking more like a substance than a group of plants.

Duckweed has the honor of being the smallest flower known at this time. Each individual plant consists of a single, flat oval leaf no more than  $\frac{1}{4}$  of an inch long. The leaf is actually a modified stem attached to microscopic sized flowers that would be very hard to see even if you had the courage to wade into green glop to retrieve one.

Despite being so tiny, a variety of pollinators have no trouble finding the flowers and spreading pollen. Pollinators could be flies, mites, small spiders and even some bees. Furthermore, living in water helps reproduction. The collision of floating stems shakes loose pollen which floats until finding a receptive stigma. Even with these advantages, most duckweed reproduction is accomplished asexually via the formation of chains of new stems from vegetative buds.

With a variety of reproductive methods, once duckweed becomes established in a water source it is hard to contain. This can be a problem if the plant becomes too successful. The dense mat can prevent oxygen from penetrating the water and blocking sunlight. Lack of oxygen affects both fish and plant populations that depend on a healthy water source for survival. Fortunately, the high level of consumption by waterfowl keeps a check on the spread of duckweed. The plant is high in protein and is therefore an excellent source of food. Currently there is discussion about making duckweed a staple of our human diet. It certainly might benefit areas where people don't get enough protein, but it will be a marketing challenge.

Another oddball plant is squawroot (*Conopholis americana*). If you wander off the towpath in May or June you will undoubtedly see a plant that looks more like a pine cone than a flower. The stalk consists of overlapping brownish-yellow scales. If in bloom there may be small yellowish flowers peeking out between the scales.

Squawroot produces no chlorophyll and therefore does not make its own food. It thrives as a parasite on the roots of trees, typically oak or beech. This relationship begins from the time the seedling drops to the ground. Instead of sending up leaves to collect sunlight, squawroot seeds dig into the soil until contacting the roots of a host tree. Once attached, the plant continues to get nutrients from the tree throughout its life cycle. A new plant stays underground for as long as four years. In the spring of its fourth year the stalk emerges. As the season progresses, yellowish flowers appear that attract pollinators such as flies and bees. The pollinated seeds fall to the ground and the cycle continues.



Above – Turtle in duckweed covered canal

Below – Wood ducks in duckweed

Photos by Marjorie Richman





Squawroot gets its name from Native American tribes who used the plant as medicine for various ailments. The plant also has two other intriguing common names: cancer root and bear corn. The origin of the name, bear corn, is probably due to the fact that bears are known to eat the plant's seeds and stalks. The name, cancer root, may be an apt description of the swelling that occurs on the root of the tree where the plant is attached. It's not clear if the tree is adversely affected by the parasite. It's currently thought that a healthy tree can accommodate the loss of nutrients, but if the tree is endangered by environmental or other conditions the loss may be more serious. Perhaps the presence of squawroot signals a healthy forest. It may not be pretty but it certainly is widespread, which might be a good thing.

Indian pipe (*Monotropa uniflora*) is another plant that challenges our concept of what a flower should look like. Other common names of indian pipe are ghost plant and corpse plant, probably because it is white and is able to grow in places that receive little sunlight. It also has a unique shape. The stem of the plant looks like a waxy, translucent, very thin pipe that nods at the tip rather than standing upright. The leaves are more like tiny scales erupting along the sides of the pipe. Each stem bares a single flower at the tip. Once the fruit capsule forms, the stem no longer nods but becomes upright.



Above – Squawroot  
Below – Indian pipe  
Photos by Nancy Robertson



Indian pipe was once thought to be a fungus. The shape and color of Indian pipe certainly could be mistaken for a fungus and, like fungus, Indian pipe has no chlorophyll and therefore cannot make its own food. It must form a parasitic relationship with a host plant in order to stay alive.

Connecting to the host plant, in the case of Indian pipe, is complicated. Rather than forming a direct relationship with a host plant, a single Indian pipe plant must first find a middle man that acts as a conduit, transferring nutrients from the tree to the Indian pipe. For this service the Indian pipe attaches itself to a special type of fungus, a mycorrhizal fungus, which colonizes the roots of a tree host. The tree provides nutrients which the fungus passes along to the Indian pipe. It seems like a rather complex set of relationships for such a delicate plant to undertake.

Indian pipe is best noted for its unusual shape rather than its benefits to animals or other plants. Be sure to look for it in forested areas that receive a lot of moisture.

Although their odd shapes make these plants particularly noticeable, their life cycles are not odd. They reproduce and obtain food as do many other members of the plant kingdom. Maybe duckweed, Indian pipe and squawroot really aren't that unusual. Perhaps they are simply excellent examples of the amazing adaptability and flexibility that can be found in nature.

---

**The Nature Committee is planning some great nature walks this year –**  
*Join us for one!*



# 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  |
| Mar. 29, Sun., <b>Continuing Hike Series</b> , 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., <b>Board Meeting</b> , 1:30-4:30 p.m., at Glen Echo Town Hall, 6106 Harvard Ave.   |
| Apr. 12, Sun., <b>Nature Walk</b> focusing on wildflowers, 10 a.m., Shepherdstown. Meet at the larger parking lot below Lock 38: follow Canal Rd. downhill from Maryland Route 34, turn left at the sign for Antietam campground, follow the road about 0.4 miles to the parking lot on the left. 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. 13, Mon., Reservation deadline for April 25 Douglas Hike activities.  |
| Apr. 18, Sat., <b>Potomac Watershed Cleanup</b> , 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., <b>Monocacy Aqueduct/Lock 27 Area Cleanup</b> , 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.   |
| Apr. 25, Sat., <b>Douglas Hike and Dinner</b> . Hikes of varying lengths. See the article on page 26 of this newsletter. Register using the enclosed form or on-line at <a href="http://www.candocanal.org/calendar.html">www.candocanal.org/calendar.html</a> . For more information, contact Steve Dean at programs@candocanal.org.  |
| May 2, Sat., <b>Nature Walk</b> 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). Participants will be contacted in case of inclement weather.                |
| May 16, Sat., <b>Paddle Trip</b> 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.  |
| May 17, Sun., <b>Continuing Hike Series</b> , 10:30 a.m., Williamsport, Lock 44, Mile 99.3 and hike downstream to view the many bridges that cross or have crossed the Potomac in this area. Contact Pat White at hikemaster@candocanal.org or 301-977-5628.   |
| May 27, Wed., Reservation deadline for June 6 Presidents' Breakfast.   |

June 6, Sat., **Presidents' Breakfast** at 9 a.m. at Bill's Place in Little Orleans, Md., celebrating Association presidents and enjoying general fellowship. A short hike will follow. See the article on page 26 of this newsletter. Register using the enclosed form or on-line at [www.candocanal.org/calendar.html](http://www.candocanal.org/calendar.html). For more information, contact Steve Dean at programs@candocanal.org.

June 7, 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 and paddlers must provide their own canoe/kayak and gear. For more information and to make reservations, contact Barbara Sheridan at canoemaster@candocanal.org or 301-752-5436.

July 11, Sat., **Nature Walk** focusing on butterflies, 11 a.m., Dickerson Conservation Area. Bring water and a snack. Optional equipment: binoculars and your favorite butterfly ID book. For further information contact Paul Petkus at papetkus@gmail.com or 773-450-6039. Walk will be canceled in case of inclement weather.

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 and paddlers must provide their own canoe/kayak and gear. For more information and to make reservations, contact Tony Laing at canoemaster@candocanal.org or 301-980-8932.

Aug. 2, Sun., **Board Meeting**, 1 p.m., at Glen Echo Town Hall, 6106 Harvard Ave

Aug. 8, Sat., **Nature Walk** focusing on dragonflies and damselflies, 10 a.m., Dickerson Conservation Area. The group will head upstream. Bring water and a dragonfly guide if you have one. For further information contact Steve Dean at levelwalker@candocanal.org or 301-904-9068.

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.

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).

Sept. 20-24, Sun.-Thu., **World Canals Conference**, Leipzig, Germany. For more information, see <http://www.wccleipzig2020.com/>.

Oct. 4, Sun., **Board Meeting**, 1 p.m., at Williamsport Town Hall, 2 North Conococheague St.

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.



# 2021 World Canals Conference Update

By Bill Holdsworth

It's only 17 months away. The dates of August 30 – September 2, 2021 are starting to seem a lot closer as the Association's World Canals Conference (WCC) committee continues its preparations.

The local support for the conference is encouraging. We have applied for a Maryland Heritage Areas Authority Program Grant to help underwrite the conference. The Washington County delegation in the General Assembly offered letters of support, as did the Chamber of Commerce, the Greater Hagerstown Committee, and the Washington County Community Coalition.

Looming large on the calendar is the 2020 WCC in Leipzig, September 20–24. The closing ceremony will highlight the official handover to the next host. That's us. We will have representatives of the Association, our co-host Visit Hagerstown, and hopefully the National Park Service on stage. Visit Hagerstown will prepare a video to entice delegates to our side of the Atlantic next year.

After Leipzig, the spotlight shifts to us. We need to be ready to publish detailed program information and activate registration on our website.

It has been many years since an all-volunteer organization has hosted the conference. I am confident that the

Association can meet the challenge. Members have been generous with their donations. I am sure they will be ready to lend a hand as volunteers.

I will highlight three volunteer opportunities that will be critical in advance of the conference.



**Registration:** We have purchased software that will allow attendees to register online. We need volunteers to act as a customer service team and interact with the software. They will have to field inquiries and adjustments from attendees, make necessary changes to the registration database, and produce lists for conference organizers.

**Speaker selection:** Those people who want to make presentations at the conference will be asked to submit abstracts via the website. In spring of 2021 we will need volunteers for the committee to review those abstracts and help select the speakers.

**Conference program booklet:** Delegates will receive a program booklet when they arrive. We need volunteers to help write and edit the booklet content. Our co-host, Visit Hagerstown, has offered to help with production, but we will be responsible for the content.

If you think you can help with any of these tasks, let me know. Please contact me at [president@candocanal.org](mailto:president@candocanal.org).

## Calendar of Events - 2020 (Continued)

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 *Along the Towpath*. For more information, contact Steve Dean at [programs@candocanal.org](mailto:programs@candocanal.org) or 301-904-9068.

Nov. 22, Sun., **Continuing Hike Series,** 10:30 a.m., location to be announced. Contact Pat White at [hikemaster@candocanal.org](mailto:hikemaster@candocanal.org) or 301-977-5628.

Dec. 5, Sat., **Frostbite Hike,** 10:30 a.m. Location will be announced in the September *Along the Towpath*.

Dec. 6, Sun., **Board Meeting,** 1 p.m., at Glen Echo Town Hall, 6106 Harvard Ave.

Aug. 30 – Sept. 2, 2021, Mon.-Thu., **World Canals Conference,** Hagerstown, Md. Follow this newsletter for updates on the conference.

## 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](http://www.candocanal.org/calendar.html) or follow Facebook [@candocanal.org](https://www.facebook.com/candocanal.org) for up-to-date event information.

# 2020 Douglas Memorial Hike and Dinner

By Steve Dean

The C&O Canal Association will honor the 66<sup>th</sup> anniversary of the Douglas Hike on April 25, 2020, with a selection of three hikes of different lengths, a baked ham and vegetarian spaghetti dinner, and an evening program. Bring your friends and join your fellow Association members to celebrate spring with a walk on one of the canal's most fascinating sections.

All hikers will meet at the MARC parking lot in Brunswick, the start and end point for the event. Plan on arriving 15 minutes before the bus departure time. The bus for all hikers will depart at 10 a.m., stopping first at Dargan Bend. Hikers starting at this point will have a 10 ½ mile trek back to Brunswick. The first part of this walk features views of interesting bluffs and rock formations on the berm side, and scenic views of the river. The second stop will drop hikers off at Lock 34, for a 6-mile return walk. This section of the walk will include passing through the Harpers Ferry area and offer views of river rapids in the Potomac. The hikers opting for the shortest route will be dropped off by the bus at Lock 31 in Weverton for a 3 ½ mile walk back to Brunswick. At Weverton all hikers can observe the features of Lock 31 – Karen Gray's *Accompanied*

by *the Past* feature about Lock 31 on page 12 of this issue is must reading before the hike. All hikers can also view the Israel Creek Culvert and note how the rains of 2018 exposed the berm arch of this large and interesting culvert.

After the hike, members will meet at the Upper Montgomery County Volunteer Fire Department in Beallsville for a happy hour at 4:30 p.m., followed by dinner at 5:30. After dinner, Don Peterson, level walker and author of *Native American Fish Traps in the Potomac River, Brunswick, Maryland* will provide a fascinating presentation about the use of fish traps the Potomac River.

Use the registration form in this issue to register, or find the form online at [www.candocanal.org/calendar.html](http://www.candocanal.org/calendar.html). The bus is \$6 per person in advance, and \$8 the day of the event. Please bring exact change. Happy hour is included in the cost of dinner and is at 4:30 p.m. Dinner is at 5:30 and is \$22 per person. Reservations must be received by Monday, April 13.

The Brunswick MARC station is located at 100 S. Maple Ave. Brunswick, Md. The Upper Montgomery VFD is located at 19801 Beallsville Rd, Beallsville, Md. Use your preferred navigation application for directions or contact Steve Dean at [programs@candocanal.org](mailto:programs@candocanal.org) for more information.

## President's Day Breakfast

Our tradition of celebrating the Association presidents and enjoying general fellowship continues for the 18<sup>th</sup> time. Join us at Bill's Place in Little Orleans on June 6<sup>th</sup>. A reservation form is enclosed in this issue, or register on-line at [www.candocanal.org/calendar.html](http://www.candocanal.org/calendar.html). Breakfast will be served at 9 a.m. The cost is \$11 per person. You must register by Wednesday, May 27.

After breakfast, participants can take a walk from Bill's on the Western Maryland Rail Trail extension and return on the towpath. Contact Steve Dean at [programs@candocanal.org](mailto:programs@candocanal.org) for more information.

Some members enjoy camping the night before at Little Orleans Campground, which is near Bill's. You can make reservations by calling the campground at (301) 478-2325.

– Steve Dean



Above – Israel Creek and Culvert 93

Below – Harpers Ferry and the mouth of the Shenandoah River

Photos by Steve Dean



**A note about the Potomac crossing at Harpers Ferry** – As you may know, the Potomac River footbridge at Harpers Ferry was damaged by a train derailment in December. It will be closed indefinitely – before planning a trip, visit the C&O Canal NHP website at [www.nps.gov/choh/index.htm](http://www.nps.gov/choh/index.htm) for an up-to-date status of the bridge accessibility.



# 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  | 301-714-2202 | Tina Cappetta |
| 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.                                       | 301-714-2204 | Ben Helwig    |
| Chief of Resource Mgmt.                                       | 301-714-2225 | Jeri DeYoung  |
| Chief of Maintenance (Acting)                                 | 301-714-2211 | Curtis Rintz  |
| Chief of Interpretation, Education<br>and Volunteers (Acting) | 301-714-2238 | Nathan King   |
| Partnerships Coordinator (Acting)                             | 301-714-2218 | Ben Helwig    |
| Volunteer Coordinator   | 301-491-7309 | Emily Hewitt  |
| Cultural Resources<br>Manager/Historian                       | 301-491-2236 | Vacant        |
| Volunteer 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<br>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 |
|-------------------------|--------------|--------------|

**Hancock Visitor Center** 301-745-5877  
439 East Main St., Hancock Md.

|                         |  |              |
|-------------------------|--|--------------|
| Supervisory Park Ranger |  | Joshua Nolen |
|-------------------------|--|--------------|

**Cumberland Visitor Center** 301-722-8226  
Western Maryland Station, Cumberland, Md.

|                         |  |                  |
|-------------------------|--|------------------|
| Supervisory Park Ranger |  | Stephanie Siemek |
|-------------------------|--|------------------|

## 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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## 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](http://www.candocanal.org). The web-  
master is [webmaster@candocanal.org](mailto:webmaster@candocanal.org). C&OCA also maintains a tele-  
phone number for recorded information and inquiries: 301-983-0825.

**Association Officers** (visit [www.candocanal.org/contact.html](http://www.candocanal.org/contact.html)  
for up-to-date contacts after the March 14 Annual Meeting)

**President:** Bill Holdsworth, [president@candocanal.org](mailto:president@candocanal.org)

**First Vice President:** Rod Mackler, [firstvp@candocanal.org](mailto:firstvp@candocanal.org)

**Second Vice President:** Steve Dean, [levelwalker@candocanal.org](mailto:levelwalker@candocanal.org)

**Secretary:** Kerry Gruber, [secretary@candocanal.org](mailto:secretary@candocanal.org)

**Treasurer:** Richard Radhe, [treasurer@candocanal.org](mailto:treasurer@candocanal.org)

**Information Officer:** Doug Zveare, [inquiries@candocanal.org](mailto:inquiries@candocanal.org)

**Board of Directors:** (terms expire in 2022): Tom Aitken, Tom Crouch,  
Tim Snyder, William R. Stewart, Pat White. (terms expire in 2021):  
Trent Carbaugh, Dick Ebersole, Christine Holdsworth, Anthony Laing,  
Paul Petkus. (terms expire in 2020): Chris Cerniglia, Jill Craig, Jonnie  
Lefebure, Bert Lustig, Barbara Sheridan.

**Committees** (contact at C&OCA address/tel. no. above): Archives,  
Christine Holdsworth; Auditing, Jon Wolz; By-laws, Dave Johnson;  
Editorial Review, Steve Dean; Environmental, Rod Mackler; Festi-  
vals, Rita Bauman; Finance, Richard Radhe; Legal Advisory, Deb-  
orah Matthews; Level Walkers, Steve Dean; Membership, William  
R. Stewart; Nature, Paul Petkus; Nominating, Barbara Sheridan;  
Programs, Steve Dean; Sales, Jill Craig; Special Projects, Susan Van-  
Haften; Volunteers-in-Parks (VIP), Jim Heins; World Canals Con-  
ference 2021, Bill Holdsworth.

CHESAPEAKE & OHIO CANAL ASSOCIATION INC.

P.O. Box 366

Glen Echo, MD 20812-0366

## Along The Towpath

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*Culvert 12, also known as the Rock Run Culvert, is between Locks 10 and 11, just below Milepost 9. It recently benefited from an extensive restoration as part of the National Park Service's Repair Watered Structures Locks 5-22 project. Culvert 12 features an extensive retaining wall along the towpath both above and below it. Photo by Steve Dean*

***Check us out on social media!***

C&O Canal Association



Founded in 1954



@candocanal.org



@CandOCanalAssoc



candocanallassoc

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