### Friends of Colvin Run Mill

### Fall—Winter 2021-2022



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#### **COMING EVENTS**

Lots going on!

See page 5 for full schedule

**Mills and the War of 1812:** Learn the importance of mills to the US Navy in feeding sailors.

Holiday Preparations and Decorations: Tour the Miller's house and learn how residents of similarly sized homes would have prepared for the holidays.

AND HE'S BACK!!

SANTA AT THE MILL: SUNDAY, Dec 11.

DECEMBR 11, 2021

#### **VOLUNTEER SHOUT OUT!**

In late September, 36 volunteers from *National Charity League Cherry Blossom Chapter* contributed over 69 hours pulling weeds, trimming plants, and pulling grass from the walkway and areas near the Education Center. And how much better the site looks!

And this is not the only event they support: they've helped with the Maple Syrup Boil-Down, Santa at the Mill, and, in the past with the Easter Egg Hunt.

Our thanks to all the participants for their hard work and willing contribution to the site.

# MEET THE NEW SITE MANAGER JULIE GURNEE



Hello! I am so excited to be part of the Colvin Run Mill team. This will be a great transition for me. Most of my career has centered around Natural History and Interpretation and I am looking forward to the challenge of managing an Historic Site, especially one with such amazing cultural resources.

I have been with Fairfax County Park Authority since 2012, working at Riverbend Park as the Senior Interpreter, then moving up to become the Visitor Services Manager. Being so close to Colvin, I was able to partner with Colvin staff over the years for various events and programs.

I have a degree in biology from the University of Montana and have been working in parks for many years. Before I started at FCPA, I worked at the Historic Rust Manor house and Sanctuary in Leesburg managing the environmental education programs.

My years at parks have been spent protecting natural and cultural resources and balancing that with programming and education. I am committed to protecting the amazing resources at Colvin Run Mill while finding ways to increase education, programming, and community involvement, while keeping the mission of the park as my guide.

I grew up in Fairfax County and spent my teen years living in Great Falls, so this place is home to me. I now live in Western Loudoun with my husband and 2 kids and a small variety of animals. When I am not working, you will probably find me involved in some outdoor activity, reading, or spending time with my family.

Julie Gurnee

Site Manager, Colvin Run Mill

### Become an Official "Friend of Colvin Run Mill"

Membership Dues Changes

At the Board of Directors Meeting in April, the Board approved new amounts for membership dues. The new dues levels are: Individual - \$35 a year, Family - \$55, Business - \$100.

If you join, in addition to receiving the Newsletters you will have opportunities for special tours, receive samples of stone ground grains at special events, and you will have the right to vote for members of the board of Friends of Colvin Run Mill (one vote for individuals and businesses and two votes for families). Best of all, your membership supports an historic treasure that continues to educate and inform and grind out fine whole wheat flour, not to mention cornmeal, grits, and buckwheat flour.

You can join now by completing the membership form on the Friends of Colvin Run Mill site (<a href="focrm.org/be-a-friend">focrm.org/be-a-friend</a>). If you have paid dues during 2020 or 2021, you will be official members through the end of 2021.

#### MAKING CIDER AT THE MILL

During October, Miller Steve Golobic demonstrated the art and craft of making cider from apples provided by participants who then pressed their own cider. Does that make it a "cider mill"? You never know what you can learn at Colvin Run Mill.



#### **Election of the Board of Directors**

The members of FOCRM's Board of Directors serve two year terms, and it's time once again for elections. Because FOCRM has reinstituted membership dues, only those who have joined will be eligible to vote – one vote for individual memberships and two votes for family membership. If you are interested in becoming a member of the Board, or voting for the Board membership, please email

<u>focrm1811@gmail.com</u>. Membership applications are available on our website at https://focrm.org/be-a-friend.

### **ROUTE 7 WIDENING**

The Route 7 construction is moving apace and is really impacting that stretch that passes by the mill site. It may delay accessibility for some time to come. But, the good news is that there is to be a tunnel under Route 7 permitting access to site land on the southwest side of the road (see photo below) and permit a better connection with the county trail system.



The tunnel under Route 7, southwest side. Northeast side (mill side of Route 7) to be built in 2022.

## MESSAGE FROM THE PRESIDENT October 2021

We, the members of Friends of Colvin Run Mill are generally a modest group. We enjoy helping out at the mill, supporting the programs and events, and spending time with each other at this beautiful historic property. However – you knew there would be a "however" with an opening like that – I want to brag just a little. FoCRM recently was recognized by the Fairfax County Park Foundation with the Eakin Philanthropy Award. This award recognizes visionary financial and material contributions which enhance Fairfax County parks and is named after LeRoy Eakin, Sr., who donated the 14 acres of land which became Fairfax County's first park.

Fundraising efforts over the past years include gathering donated clothing and household goods for the McLean INOVA Thrift Store, selling publications authored by founding member Marjorie Lundegard and soliciting donations from groups who use the park as a gathering point for their hiking and running. We've donated over \$50,000 for the support, preservation and capital improvements at the park since our founding. In addition, we've provided thousands of volunteer hours in support of the fun events, educational programs and physical maintenance of the park. We've also facilitated private donations to the park of custom commissioned historical replica furnishings. And we love every minute of it.



In keeping with this opportunity to brag, I want you to know about the people behind FoCRM. We come with varied interests and backgrounds: educators, engineers, gardeners, history buffs, and members who maintain our web site and social media sites. We have members who regularly volunteer some number of hours each month, some who just help out with occasional special events, and some who kindly support the organization with annual membership dues or donations. Just over the past year, FoCRM purchased a new commercial freezer for the miller to store grain and flour, we purchased new blacksmith tools for demonstrations at the forge, we commissioned a museum quality working model of an Archimedes screw and grain elevator for visitors to operate, we repainted the interior of the education center and provided the park with new tablets, a projector and screen for

use during tours and educational programs. Not bad for a pandemic year.

We're always appreciative of new members and welcome all those who love history, value nature and enjoy working with friendly people. If you would like to volunteer to help out at the mill, contact us at form1811@gmail.com.

To become a paid member, the tax-deductible membership fee is \$35 for individuals or \$55 for families. Paid members receive quarterly newsletters, special tours, samples of stone ground grains at special events, and the right to vote for members of the board of Friends of Colvin Run Mill. To become a paid member of FoCRM, complete the membership form on our website, FriendsOfColvinRunMill.org.

Either through volunteering or through paid membership (or both), I would love for you to be part of this organization I'm so proud of.

Dan Dyke, President, Friends of Colvin Run Mill

# THE "HOPPER BOY" AT COLVIN RUN MILL, GREAT FALLS, VA

No, this column is not about a boy bouncing around the beautiful picnic grounds at the mill on a space hopper ball holding on to its rubber handles for dear life. That's the image that pops up when you google "hopper boy." Rather, this is about solving a puzzle that made flour milling one of the first fully automated manufacturing processes. The solution to the puzzle was the "hopper boy."

The question was how to "spread and gather" at the same time. Like rubbing your belly and patting your head simultaneously. Not natural movements in tandem; the maneuvers take concentration. In the mechanical world, it takes a very clever invention.

The 28 year old Oliver Evans was vexed with the question when he was charged with constructing a flour mill for his two older brothers at Red Clay Creek near Newport, Delaware around 1783. Oliver had apprenticed as a wheelwright and proved to be clever with his brain and hands. He developed a labor-saving device to manufacture textile cards that combed fiber for spinning. He began to toy around with steam power, a true novelty of its day.

The Evans brothers believed that clever Oliver could automate flour milling. The idea was to reduce the amount of labor required, which was substantial, and avoid waste and contamination, also, unfortunately, substantial in this dusty trade.

To save labor Oliver created elevators using small buckets or cups attached to a strap and hoisted by a pully powered by the water wheel. The elevators would move the grain up to the loft to be cleaned and move flour up to be sifted. This eliminated the "sack and back" of manually packing and carrying grain and flour to the upper lofts in the mill.

Additionally, he developed a "conveyor," based on an Archimedes screw, made of paddles attached to a long screw in two continuous spirals, enclosed in troughs. This conveyor pushed the grain into the rolling screen to be cleaned and the flour into the elevators to be transported to the upper loft. To avoid waste and prevent contamination, the elevators were enclosed in a wooden column. These were old technologies he adapted to new uses, major innovations.

So far so good. But the biggest challenge was processing freshly ground flour so it could be sifted. The typical milling technique at the time was to position the runner stone, spinning at over 100 revolutions per minute (rpms), as close as possible to the stationary bed stone to get as fine a grind as possible. The pressure of these one-ton stones against each other combined with the spinning action caused friction that generated heat, drawing moisture from the wheat berry. As a consequence, freshly ground flour was warm and damp, causing it to clump. These clumps would clog the sifters or bolting cloths.

Young men, dubbed "hopper boys," would sack the flour, haul it up to the top loft, spread it on the floor, and handrake it to break up the clumps and cool it. The "hopper boys" would then move the flour to the bolting box for sifting. This process was time-consuming, wasteful as some flour would naturally fall through the cracks, clearly unsanitary as anything hitting any floor let alone a wooden mill floor would become dirty (spoiler alert: the 5 second rule is a myth), and be a haven for insects and little critters. Eeuw!



Evans came up with a mechanism that would spread and gather the flour, just like a hopper boy. He attached arms with small inclined boards – called "flights" – to the bottom part of upright shaft and a wooden ring with cogs to the top part of the shaft. The cogs meshed with a gear driven by the waterwheel and turned the shaft an extremely leisurely four rpms. The flights would slowly rake and turn the flour while at the same time moving it toward the center where a hole would allow the cooled, clump-free flour to drop into the bolting box to be sifted.

This automated "hopper boy," eventually enclosed with a wooden rim, saved time and labor, eliminated most waste, and was as clean as one could hope for in an 18<sup>th</sup> century mill. It was the final piece for the Evans brothers to have a continuous, integrated milling process: a revolution for the industry and one of the first examples of fully automated manufacturing.

Few hopper boys exist today. Colvin Run Mill is pleased to have a reconstructed one on the top floor of the mill. Not all tours will take you to the top floor, so be on the lookout "four floor" tours so you can see for yourself how Evans solved the riddle to "spread and gather" at the same time!

# COMING EVENTS AT COLVIN RUN MILL NOVEMBER 2012 THROUGH JANUARY 2022

(REGISTRATION REQUIRED FOR SOME EVENTS)

**Grind Day: November 7, and the final grind of the season November 21**: See the mill in action as the water wheel powers the gears and mill stones to grind grain into flour or cornmeal.

Holiday Preparations & Decorations Tour November 6 and 20, December 11 and 18:Tour the miller's house and learn how local residents of similar sized houses would have been preparing for the winter holidays.

**Mills and the War of 1812** November 13: Learn how mills like Colvin Run played an important role in times of war as members of *Ships Company* interpret life in the US Navy during the War of 1812.

**Holiday Decorating with Bows December 8**: Spend an evening learning to make unique bows to decorate tables, mantles and trees for the holidays.

**Children's Holiday Shopping December 4 and 5**: Children bring their shopping lists and monies to do some holiday shopping at the general store. To keep gifts a surprise, Colvin Run Mill volunteers help shoppers navigate the store and wrap their purchases. A waiting area for parents and guardians is provided.

**Santa at the Mill December 11**: Enjoy old-fashioned holiday fun at Colvin Run Mill. Visit Santa in the mill, sip hot chocolate, sing around the campfire, and make holiday crafts.

**Yoga at the Mill 1/3-2/28 Mondays 9:30am-10:30am**: Stay limber, focused, and grounded while practicing yoga at Colvin Run Mill's tranquil 1811 setting. Exercise and enjoy the historic past as it meets the wonder of the present, honoring the best of both worlds through a sense of community that is simultaneously old and new. The last class includes a tour of the historic Colvin House.

What we Know-Enslaved People of the Mill 1/15 11am, 1pm, 3pm: Enslavement occurred in homes, shops, farming fields and other places of work. As a factory and a home, Colvin Run Mill combined all of these. During the program, learn how the work of the enslaved might have contributed to each of Colvin's spaces.

**Beginning woodcarving** 1/16-2/20 1pm-3pm: Learn the basics of woodcarving from the Northern Virginia Carvers in this three session series hosted by Colvin Run Mill.

**Needle Felting Posable Mouse 1/20 and 1/27 7pm-8pm**: Needle Felting is a recent craft with a rich history. Learn to combine wool and other fibers with a wire armature to create a cute, posable mouse figure.

**Colvin Run Book Club 1/20 7pm-8:30pm**: Enjoy tucking into a Jane Austen novel. Join us at Colvin Run Mill as we explore three of Austen's most popular novels. In January, we will read Pride and Prejudice; in February – Emma, and in March – Sense and Sensibility

Please see the website for additional information and to register for these events: https://www.fairfaxcounty.gov/parks/colvin-run-mill