



Colvin Run Mill

SPOOM

Mid-Atlantic Chapter

August 2011



Mid-Atlantic SPOOM Chapter Board Meeting

Colvin Run Mill 10017 Colvin Run Road, Great Falls, Virginia 22066

SPOOM-MA BOARD Meeting – August 20, 2011 8:30am-4:00pm

\$10 Fee includes all Activities listed under Parts 1 & 2.

Pre-registration is requested to ensure availability of adequate meals and resources.

To Pre-Register for the Meeting: Send the names and phone numbers or Email addresses of all attendees to the SPOOM-MA secretary Judy Grove at JudyGrove@Verizon.net or 717-741-4366 by August 15. The \$10 Fee may be paid at the door in cash or by check payable to SPOOM MA.

PART 1: SPOOM-MA Meeting at the Colvin Run Mill

8:30 -9:00 Reception, Coffee, & Registration

9:00-10:30 SPOOM-MA Business Meeting

10:30 Stretch Break

10:45 The Mills of Ellicott City – Ivan Lufriu.

**11:45 The Northern Virginia Community College (NVCC) Mill Mapping Project -- Charlotte Cain,
NVCC.**

...cont'd P. 2

SPOOM-MA Board Meeting (cont'd)

12:45 Lunch

PART 2: Afternoon Tour Options

2:00-4:00 Tour of the Colvin Run Mill Historic Site .

4:00 Adjourn

Directions to the Colvin Run Mill: From I-495 take the VA Route 7 West-Exit onto Leesburg Pike. Travel WEST on Route 7 for 4.5 miles to Colvin Run Road at a traffic light. Signs for Colvin Run Mill are on the right side of Route 7. Turn right onto Colvin Run Road. Go .1 miles to the Colvin Run Mill parking lot on the left.

Proposed SPOOM-MA Board Member for 2011-2012:

**Susan Langley
Marlene Lufriu
Ivan Lufriu
Mason Maddox
Adam Sieminski
Steve Springs
Nick Yannarell
Charles Yeske**

These proposed Board Members are to be approved by the SPOOM-MA Officers on August 20, 2011

****SPECIAL PRE-MEETING TOUR****

Of Historic Mills of Northern Virginia

Friday August 19, 2011 from 8:00 am - 4:00pm

Advance Registration is required.

The initial meeting point will be in the Parking Lot at the Colvin Run Mill. The group will assemble and depart at 8:00 am. Travel to the listed mills and view others in passing, as time allows.

- 9:00-10:00, Aldie Mill: There will be a guided tour of this operational mill.
- 10:30-11:30, Buckland Mill: This mill is undergoing restoration. The restoration and the historic Buckland site will be presented. After the tour, lunch will be taken on the site grounds.
- 1:00 Clifton Mill: This mill is being restored and is in Upperville, VA.
- 2:00-2:30, Burwell Morgan Mill: This is a fully restored operational mill in Millwood, VA.
- 3:00-4:00, Lockes Mill: This mill is being restored by the owners, Jon & Carol Joyce. The restoration will be presented during a tour of the mill.

During the tour there will drive by views of the Beverly Chapman Mill, the Fleetwood Roller Mill, and the Little Fork Mill.

\$20 Fee includes Transportation* and Lunch

*A minimum of 8 participants are needed to cover costs for the van. If less than 8 people sign up, we will carpool to the sites and the fee will be reduced accordingly.

To Register for the August 19th Pre-meeting Tour: Send the names, phone numbers or Email addresses of all attendees, to Marjorie Lundegard, 950 Carya Ct., Great Falls, VA, 22066 by August 17.

Include a check payable to the Friends of Colvin Run Mill for the \$20 Fee.

Suggestions for Overnight Accommodations

Comfort Inn on Eldon Street in Herndon, VA a few miles from the Colvin Run Mill.

Call 1-800-228-5150 for reservations.

Holiday Inn Express also in Herndon, VA.



National Milling Day Poster



Artes Mill, MD



Union Mills Homestead, MD



Saint Vincent Mill, PA



Peirce Mill, MD



Nott's Mill, PA



Otterdale Mill, MD



Fleshman's Mill, PA



Groff's Mill, MD



Newlin gristmill, PA



Anselma Mill, PA



Colvin Run Mill, VA



Cooper Mill, NJ



Doubs Mill, MD



Greenbank Mill, DE



Aberdeen Mill, PA



Crouse Mill, MD



Pry's Mill, MD

August 28, 2011

Designated as National Milling Day by
The Mid Atlantic Chapter of SPOOM

Oliver Evans' Improved Grist Mill

by Sam Moore, reprinted with permission.

www.FarmCollector.com.

Flour was an important commodity to early American settlers. Many ground their flour in a pestle made of a hollowed-out tree stump. The mortar was a piece of log suspended over the stump by a rope from an overhanging branch or sapling. The spring action of the branch gave some lift to the mortar as the operator lifted and then dropped it to pound the grain into flour. Sometimes a crude stone hand grinder called a quern was used, but either process was slow and laborious. In an early account of frontier life in Ohio the author writes: "I well remember that in 1791 so scarce and dear was flour that the little that could be afforded in families was laid out to be used in sickness, or for the entertainment of friends."

As the number of settlers in an area grew, some enterprising individual would build a water-powered mill along a stream. The neighboring farmers then made regular trips to the mill, carrying "grists" of grain to be made into flour. As fee for his services, the miller typically took one-tenth of the grist, an amount set by law in most states. Since farmers didn't want to travel far for flour, mills sprang up everywhere, often only three or four miles apart. The early mills were slow, inefficient and labor intensive, and furnished many opportunities for contamination of the flour by dirt, insects and vermin.

Evans the innovator

Oliver Evans changed all that. Born in Newport, Del., on Sept. 13, 1755, at 16 Evans was apprenticed to a wheelwright who taught him to build wagons. Being curious and ambitious, the young man studied math, mechanics and science in his spare time and developed into an excellent



Winter in the Country – The Old Grist Mill
by George Henry Durrie (1820-1863).

Oliver Evans' Improved Grist Mill (cont'd)

“mechanician,” as they were called in those days.

Evans joined his two brothers in running a grist mill. Being inventive, he set out to improve the way flour was made. He designed bucket elevators to raise the grain and flour vertically and chutes to carry them back down, along with screw conveyors to move them horizontally through the mill. He also developed a rolling screen to clean the incoming grain before it was ground.

When freshly ground flour first came from the mill stones, it was hot and damp. To prevent caking, it had to be stirred while it cooled and dried. Standard practice was to spread the flour on the floor, where a miller's boy stirred it with a hand rake until it was dry and cool. The procedure took a long time and was inherently unclean. Evans developed a machine, appropriately named a “hopper boy,” that performed the operation with a large mechanical rake inside an enclosed bin.

In the 1780s, Evans built a completely automatic grist mill in New Castle County, Del. Powered by a water wheel, the mill was the first continuous flow, production line mill in the world. An English book of the day described the mill: “Mr. Oliver Evans, an ingenious American, has invented ... A flour mill upon a curious construction which, without the assistance of manual labor, first conveys the grain ... to the upper floor, where it is cleaned. Thence it descends to the hopper, and after being ground in the usual way, the flour is conveyed to the upper floor, where, by a simple and ingenious contrivance, it is spread, cooled, and gradually made to pass to the boulding hopper.” The product wasn't touched by human hands from the time the grain was dumped into the receiving hopper until the finished flour flowed into a bin ready for packing into barrels or bags.

Newfangled ideas finally take hold

Like many inventions, Evans' mill machinery was slow to be accepted. Millers were like farmers and looked with suspicion upon any new method or machine different from that used by their fathers and grandfathers. Eventually, mills began to incorporate some or all of Evans' improvements. Since there was no patent protection during the 1780s, Evans usually received no money for use of his ideas by others. Finally, the U.S. Patent Office was established in 1790. The third patent issued by that body was to Oliver Evans for “his method of manufacturing flour and meal.”

Oliver Evans' Improved Grist Mill (cont'd)

Sometime in about 1800, Thomas Jefferson had a grist mill built, leaving all details of construction to his millwright who borrowed heavily from Evans' methods. In 1808, President Jefferson found out about the patent and wrote to Evans, "I am informed and indebted to you for the machinery erected and interest on it, \$89.60 [\$1,545 today], which sum I therefore now remit you in a draft on the Bank of the United States." Evans replied, acknowledging the payment, " ... for license to use my improvements at your mill at (Albemarle) County for which I return you sincere thanks ... I can say with truth that had all those who had used my improvements paid as generously as the President of the U.S., I might have been enabled to render my country much greater service."

But mills weren't all. In 1803, Evans reportedly was the first person to successfully burn coal in a grate. Up to that time homes were heated by wood fires, with coal used primarily in blacksmith's forges and in making ammunition. In 1805, he designed probably the first refrigeration machine, although it wasn't until 1844 that a doctor named John Gorrie improved on Evans' design to build a machine that made ice to cool yellow fever patients.

In Buffalo in 1842, Joseph Dart built the nation's first grain elevator to load and unload grain from canal and lake boats. Prior to that, all grain was hand-loaded and unloaded by laborers, or "Irish backs," as one grain merchant put it. Dart's elevator could move more than 1,000 bushels per hour. Grain elevators soon became common in every grain shipping port. Dart later said, "It was the first successful application of the valuable inventions of Oliver Evans to the commercial purpose for which it is now extensively employed."

Branching out to steam

Scotsman James Watt is famous for improving Newcomen's steam vacuum engine that relied on atmospheric pressure to move the cylinder. Watt developed a double-acting cylinder that alternately admitted steam on each side of a piston to provide a powered stroke in each direction. While Newcomen's engines were used primarily for pumping water, Watt's improved low-pressure engines were practical for running other machines, but they were large and heavy, limiting their usefulness in vehicles.

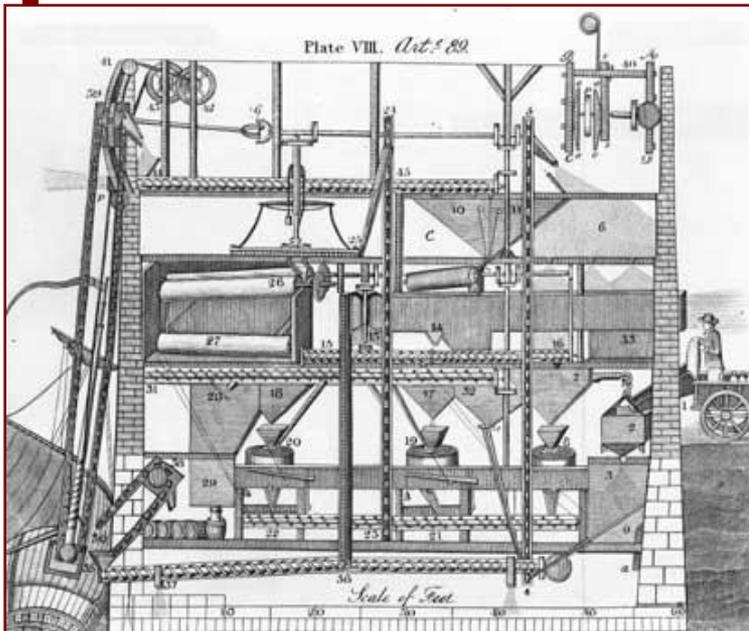
Oliver Evans' Improved Grist Mill (cont'd)

As a young man, Oliver Evans had studied Newcomen's engine and became fascinated by this new source of power. During the 1780s, Evans designed and built a high-pressure, non-condensing steam engine that was compact, lightweight and of simple construction. While Watt is credited with inventing the low-pressure steam engine, Oliver Evans built the first high-pressure engine.

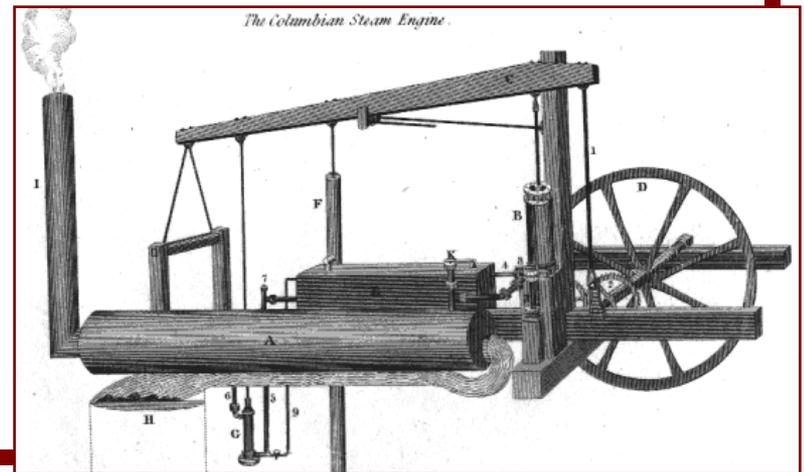
*Sam Moore grew up on a farm in western Pennsylvania. He now lives in Salem, Ohio, and collects antique tractors, implements and related items. Contact Sam by e-mail at letstalkrustyiron@att.net. For more on grist mills, read a first hand account of *A Trip to the Grist Mill* from the May 2011 issue.*

Read more: <http://www.farmcollector.com/print-article.aspx?id=2147490179#ixzz1JJELf45m>
Reprinted with permission see: www.FarmCollector.com.

Submitted to SPOOM-MA by Steve Spring.



◀ Two examples of Evans' mills ▼



A Trip to the Grist Mill

Sam Moore, Reprinted with permission.

Watt's Mill near where I grew up in South Beaver Township, Beaver County, Pa., was a classic example of a grist mill. The mill was built in 1798 and operated continuously until it burned on Jan. 14, 1916. Frank Steele, who grew up in the area during the early part of the century, recorded the following recollections of Watt's Mill:

“In the winter of 1912, my father and I went to Watt’s Mill with 10 bushels of buckwheat and two bushels of corn to get ground. (We had) to go down to the Little Beaver Creek, which we had to ford. The horses did not want to cross as the water was real deep, about two inches from the bottom of the spring wagon. Tom Watt and his brother Jim operated the mill. They also had a sawmill (although) I never saw it in operation.

“They would not grind buckwheat when the weather was damp, as the buckwheat would not grind well on a damp day. They did not like to change from grinding buckwheat to corn, as they had to operate the mill (empty) a short time to get it cleaned out.

“Stone grinding wheels were used, turned by a water wheel laid on its side, called a tub wheel. They let the water wheel operate continuously in real cold weather so it would not freeze. In winter there would be pieces of ice come through the water wheel. It would sound like a lot of glass being broken, (or) a bunch of rocks in the wheel.

“The door of the mill was higher than the wagons, (so) they had a plank to leave down to the bottom of the wagon. You would fasten a rope around two or three sacks of grain and they would pull the sacks up the plank to the mill floor. The rope was fastened to a revolving shaft operated by the water wheel.

“The Watts brothers would take part of the flour as toll. I believe it was one eighth. They would rather have flour than cash, as there was a great demand for the flour.



A woodcut of Watt's Mill from an 1876 Beaver County directory. Reuben Watt is listed as the proprietor and the Tom and Jim Watt mentioned by Mr. Steele were probably his sons or grandsons.

A Trip to the Grist Mill (cont'd)

“Mr. Jim Watt told us about being to the Klondyke (sic) gold rush in Alaska (and) showed us the gold watch and chain made from the gold he had panned. He smoked a corncob pipe (and) would reach in one chute where the buckwheat hulls came down from the screen and filled his pipe with hulls and smoked it. It did not smell very good to me.

“In 1915, Frosty Cook and I would take 15 bushels of buckwheat and two bushels of corn in the sled and we had to leave it because there was so many grists ahead of us. We would go back in a week taking 15 bushels more. That year my father raised 120 bushels (of buckwheat). He sold the flour in Beaver Falls at the Grand Hotel (and) also at a lot of restaurants. We would have buckwheat cakes every breakfast and mush fried every weekend.”

The old mills were still important even into the 20th century. A few scattered around the country are operated as part of various festivals and celebrations. You should visit one of these if you get a chance; they're quite interesting.

***For more on grist mills, read Oliver Evans' Improved Grist Mill from the May 2011 issue.
www.FarmCollector.com.***

Submitted to SPOOM-MA by Steve Spring.





Question from Dianna Shuler: I am inquiring as to whether you can shed any light on the kind of stone this is. It was buried in the yard at the home place for years and no one knew anything about it. We live in Morgan county, Indiana near a small creek, nothing large enough to power one of these, I don't believe..... I have attached a picture of it for you....it appears to be pink granite....would it have come from this area? I find it intriguing and just wonder what it most likely was used for, was it water or horse powered, what era was it likely used in? Any info. will be greatly appreciated. I sure wish it could talk! Oh, and on the top side where the cross pattern is cut in the hole, about mid way all around it appears to be discolored or darkened. but not the entire top...both edges, inside and out are clean and same color as the outside.

Answer from Ivan Lufriu: Granite, which is usually gray or white, is an igneous rock, which means it is a product of volcanic eruption, from deep within the earth. One of its constituents is feldspar. In excess, this can color the stone red or flesh color. Granite that has cooled slowly will cause the stone to be coarse grained, which would make it desirable as a millstone. Granite has greater strength than marble, is extremely resistant to weathering, and is therefore an important building stone. You will find pink granite used in buildings where this type of stone is abundant. The millstone pictured appears to be in good condition, and could probably be used. The slots indicate that this is a runner stone; and there may also be a corresponding bed stone buried in the same vicinity. This millstone was most likely water powered, and used for grinding grain. Water in a small creek could be retained behind a dam, and therefore provide adequate power to run a small mill. Or possibly, the mill could have been along the White River. Since Morgan County is along a direct route from St. Louis, the stone could have originated in Granite City.



Question from Ed Richards: Paddy and I are owners of the Williston Mill near Denton, Maryland. The lake that services our mill has been closed to recreational use by the local health department for the past 2 summers. They say we have "harmful blue-green algae, called "microcystis" with high toxic levels. The official from the department now says that it might be dangerous to even touch the water. Since it runs through our mill this is a real problem. In trying to follow up I was told that this is a problem in many lakes and ponds in Maryland and is also a problem nationwide. I would like to find out if other mill owners have encountered this problem and to learn about their experiences. Anything you could do to put me in touch with them would be greatly appreciated.

Answers Welcome. Comment from Susan Langley: I saw this site online. They claim to be able to prevent algal blooms...don't know whether they can cure an existing one. <http://lakes.solarbee.com/>



Check out mill preservation activities in the Mid-Atlantic area by going to: www.spoommidatlantic.org and clicking on "More Information/Newsletters."

❧ Save the Date ❧

Upcoming Chapter Meetings:

Sept, 17, 2011: Open House at Summit Point Mill, Summit Point, WV. Hosted by owner, Danny Lutz. This is the Saturday before the National SPOOM meeting. More information at SPOOM-MA Meeting.



Articles, photographs, and upcoming events are due to Susan by September 22th for the next newsletter. Don't forget photo credits/captions. Please use Word documents and jpgs whenever possible as pdf's are v. difficult to use. Also, please remember to let everyone know about Spring Flings, Craft Sales, Pancake Breakfasts and all the fun and fundraising activities out there, as well as all the news and events related to your mills or mills in your neighborhood. Email to: slangle06@comcast.net.



It's Time to Renew!

SPOOM Mid-Atlantic Memberships run on the calendar year, so 2011 Membership Fees are now due. Use the renewal form sent to you via Email or snail mail or the membership form at the end of the newsletter to continue your membership. Individual memberships are \$10 with current SPOOM membership or \$15 without. Sustaining Membership is a new category for 2011. The \$25 fee provides additional funds for the support of mill restoration efforts within the chapter. As always, each membership provides the quarterly newsletter, information on mills and seminars, tax deductible dues, and invitations to mill tours and semi-annual meetings. Please submit your payment promptly so you can continue to enjoy your membership benefits. Encourage like-minded friends to consider joining as well.

MEMBERSHIP SUBSCRIPTION FORM

Please enroll me as a member of the Mid-Atlantic Chapter of the Society for the Preservation Of Old Mills

Please Print

Name: _____ Milling Connection: _____

Address: _____

City: _____

State/Zip Code _____

Telephone Number _____

E-mail Address _____

(newsletters are emailed or posted in web site when possible to save postage)

New Subscription Renewal

Please Check One:

Individual, Member of SPOOM - \$10.00

Individual, Not Member of SPOOM - \$15.00

Sustaining Membership - \$25.00

Please indicate level of membership and mail this form with your check or money order to **Membership Manager, 3311 Littlestown Pike, Westminster, MD 21158. Please make your checks out to Mid-Atlantic Chapter.** The Mid-Atlantic Chapter is a member in good standing of the Society for the Preservation of Old Mills and serves, Maryland, Delaware, Pennsylvania, Virginia, and the District of Columbia