Miller's Forum

July 10, 2006

Hosted by the Mill at Anselma
Chester Springs, PA

Heather Reiffer, Executive Director

David Rollenhagen, Miller

Transcribed by Kathy Cattell,
Recipe Committee Chair

Supported by the Heritage Philadelphia Program, funded by
The Pew Charitable Trusts and administered by The University of the Arts

1730 Conestoga Road, P.O. Box 42, Chester Springs, PA 19425
Tel: 610-827-1906 info@anselmamill.org

The Mill at Anselma
A National Historic Landmark

Nestled along the Pickering Creek in Chester Springs, Pennsylvania, the c. 1747 Mill at Anselma is an extraordinarily rare example of a custom water-powered grist mill. Its surviving, completely intact equipment pre-dates the innovations of American inventor, Oliver Evans. In contrast to larger merchant mills, custom mills like Anselma served the local community, milling flour and animal feed to fill specific orders. The Mill's basic power train, made up of a wooden shaft and gears, is laid out and functions today as it did when it was first built.

The Mill at Anselma was designated a **National Historic Landmark** in April 2005. National Historic Landmarks are nationally significant historic places designated by the Secretary of the Interior because they possess exceptional value in illustrating the heritage of the United States. The Mill at Anselma is one of fewer than 2,500 historic places that bear this national distinction.

The Mill at Anselma Preservation and Educational Trust, Inc., was formed in 1999 with the vision of creating an innovative historical attraction through the restoration of the Mill at Anselma. The Mill was initially preserved by the French and Pickering Creeks Conservation Trust in 1983. Recognizing the need for a renewed effort to complete the Mill's restoration, the Conservation Trust cooperated with West Pikeland Township and the Chester County Commissioners to establish the Mill at Anselma Trust as a separate 501 (c) (3) nonprofit organization. The Mill at Anselma Trust is dedicated to the preservation and interpretation of the Mill at Anselma, which demonstrates the evolution of technology over three centuries and the impact of technological change on commerce, transportation and free enterprise.

The Mill was carefully restored after a four-year project that achieved national, state and local recognition for excellence in historic preservation. The Mill Trust has received awards from the American Association for State and Local History (2005); the Schuylkill River National and State Heritage Area (2005); Preservation Pennsylvania (2004) and the Preservation Alliance for Greater Philadelphia (2003). 1200 residents and visitors attended to celebrate the Mill's return to operation in May 2004.

Serving Our Community Today

Today, the Mill at Anselma hosts scholars, schoolchildren, visitors and local residents, connecting them with America's agricultural and industrial past through tours, milling demonstrations and its stone ground flour. The operating grist mill offers powerful sensory experiences through the sound of rushing water, the vibration of turning millstones, and the aroma of freshly ground cornmeal.

Forum Background

In 2005, a grant from The Pew Charitable Trusts' Heritage Philadelphia Program brought together a team of consultants to the Mill at Anselma to broaden the Mill's historical scholarship and to explore the use of various interpretive methods including signage, hands-on activities, and new technologies. As this team researched the Mill's past and the evolution of its milling technology, discussions with seasoned millers, including Alisa Crawford, Tom Kelleher and Mason Maddox, as well as Mill advisor Stephen Kindig and historian Brooke Hunter, compelled the Mill to host a forum to bring millers together to discuss public interpretation of milling processes and the preservation of milling as a craft.

Contents

Introductions and Site Overviews

Heather Reiffer, Executive Director and Dave Rollenhagen, Miller, the Mill at Anselma

Steven Bashore, Miller, Stratford Hall Plantation
Stratford Hall Plantation is a colonial site that belonged to the Lee family. It underwent a major renovation between June 2001 and October 2003. They grind wheat, yellow corn, buckwheat and grits.

Alisa Crawford, Maiden Mills
Alisa runs a windmill that was built in 1761 in the Netherlands, and was moved to Holland, Michigan in 1964. It is the last one left in the U.S. from the Netherlands. It is a 7 story windmill that is part of a 36 acre park, and the site gets 55,000 visitors a year. They grind only wheat, and produce whole wheat graham flour.

Pete Curtis, Miller, Philipsburg Manor, Historic Hudson Valley
Philipsburg Manor is a plantation that was run by slaves. The educational focus of the site is slavery in the North. They have one run of French burr stones and grind wheat and corn.

Dr. Brooke Hunter, Asst. Professor, Dept. of History, Rider University
Brooke received her PhD from the University of Delaware; her interests focus on the milling history of the mid-Atlantic.

Tom Kelleher, Assistant Curator of Historic Trades, Mills and Mechanical Arts, Old Sturbridge Village
Old Sturbridge Village is a living history site that is home to a horse-drawn cider press dating to 1840, a water-powered wool carding setup dating to 1820, a water-powered sawmill and a water-powered grist mill.

Peter Kricker, Rondout Woodworking
Peter has been associated with many of the mills represented at this forum. He enjoys discovering the quirks of each mill that he works with.

Mason G. Maddox, Jr., Miller, Colvin Run Mill
Colvin Run is a George Washington site; it is a three story merchant mill. Mason also dabbles as a millwright in addition to being a miller. Colvin Run has two runs of stones, as well as an uncompleted Evans system. They grind wheat, yellow corn, grits, whole wheat flour and buckwheat.

Harold Rapp, Historic Walnford & Vice President, Society for the Preservation of Old Mills (SPOOM)

Walnford underwent restoration work, and is now in the maintenance and repair phase. Walnford, a milling village, dates back to 1735 and has a grist mill. As Vice President of SPOOM, Harold is involved with education and interpretive manuals.

Willam Robbins, Miller, Yates Mill
William, in addition to being a miller, is also a restorer. The restoration of Yates Mill was completed last June. They are in a partnership with Wake County, NC to show the mill to the public. William also has written a maintenance manual for the mill. Yates Mill dates back to 1756 and is a county custom mill; it is the only example left in the county. It contains many Oliver Evan features, including a surviving hopper boy.

Tony Shahan, Executive Director, Greenbank Mill
Greenbank Mill was in continuous production from 1677 until 1969. It is currently not grinding, and they are in the building/restoration phase of their program. The mill is a quarter mile downstream of where Oliver Evans was based. The site is now a grist and textile mill site that aims to show how milling fits into the larger world. They will get 11,000 visitors this year, and also offer a historic engineering course.

Ivins Smith, Miller, Cooper Mill
Ivins has been at Cooper Mill for 27 years, where the focus is on education. There was originally one run of stones, and they now run two. The mill was originally a merchant and custom mill that was built in 1826. The mill now runs as it did in the 1880's, and they grind wheat, corn, rye, buckwheat, millet and spelt. The mill presents four basic school programs: history, mill town, *Pancakes, Pancakes*, and simple machines.

Dabbs Woodfin, Newlin Grist Mill
Newlin Grist Mill was built in 1704, closed in 1941, restored in 1958 and open since 1960. They focus on reinterpretation; the area where the mill is located used to be a complex milling community, but that is all gone now.

Site Interpretive Programs

Heather reviewed the interpretive planning at Anselma and described the community outreach program that involved the board members contacting schools, organizations, and the park commission. When a community workshop was held, it turned out that people did not care so much about the history of the mill, but they wanted food. The interpretive plan for the Mill focused on the evolution of the mill through time and how the mill was central to the community and the land. They wanted visitors to experience the site in many different ways, not just through tours.

Ivins shared their program for children at Cooper Mill using the book *Pancakes, Pancakes*, by Eric Carle. The book is read to the children, and each part is acted out using the mill and props; they carry in 100 pound bags of grain (really Styrofoam peanuts), they pull an egg out from behind a stuffed hen, they get milk from a little cow, they mix up the pancakes and then cook them over a fire. The children do not get to eat the pancake, however.

Pete also shared their educational programs at Philipsburg Manor, which span grades K-12. They read The Little Red Hen to the younger children, using a hand mill and hardtack or bread as props. For older students, there are a lot of hands-on activities to get the kids involved. For grades 4-6, there is a Millers and Merchants program to show the students that the mill is a tool. Water is the focus, and lots of tools are used. The students can tour the main house, which was used as a warehouse, and are able to touch the silks and furs. The senior high program is Life and Labor. They show the kids why wheat is important. There is also a focus on slavery in the Northeast, since many people do not think that slavery existed in the North. The site has an African American Advisory panel that assists them with presenting this to the students. The 12th graders are especially difficult because they don't always want to acknowledge slavery. The tours have 60 kids maximum, and there are two tours, one at 10 am and one at noon. Each tour is split into four subgroups and there are guides at each station. The number of chaperones is limited. All staff is paid, most are part-time. The site is a non-profit site. There is a $10 admission fee per adult ($5 per child) for the hands-on activities. All staff is cross-trained, and the site is open 6 days a week (closed Tuesdays), from March through September (closed January and February). There is lull in January. During the month of February, the site runs a working community for grades 4-6; there are 25-30 kids, and they each spend 1 hour per building, doing activities such as baking or mucking stalls. When they are done, the staff member works with the kids to interpret what they did and how it was relevant. There is also a similar program for city kids ages 16-18; they do larger projects such as building boats, and they will run the program again this year. The site also has afternoon programs. Pete presented Philipsburg Manor's curriculum overviews which are sent to each school before they visit. These cover the concepts that the teachers should cover before their visit, and also outlines what can be expected during the visit and the anticipated learning outcomes. The main office of the site prepares the curriculum overviews.

Maddox shared Colvin Run's educational programs, which is $3/child, and focuses on simple machines which tie in with school curricula. Each group of 60 children is divided into 3 groups; each group then tours the barn, the mill and the store. They do one school per day, and generally do not get students past third or fourth grade. They run programs year-round, and send out a teacher packet and video ahead of time. In December, Santa visits the mill, and they have a children's shopping area set up for a week so that kids can go in with a predetermined amount of money, and a shopping list, and get presents for their family. They also do an American Girl program, a preschool puppet show, wheat plant potting, and maple syrup tapping. Docents conduct many of the programs. Maddox takes the portable mill out to shows to garner interest in the mill. They also do a program where kids can build a portable sailboat and sail it in a portable pond. One problem facing Colvin Run is that the county wants them to generate more revenue.

Walnford does groups of 60 fourth graders (since fourth grade is when N.J. history is covered). Teachers put together their curriculum. There are three groups, each touring the mill, the house or the archeology pit. They handle one group per day. The mill is a long drive for most schools, so tours rarely start before 10 am.

Steve pointed out that Stratford Hall Plantation is also far from most schools. They focus on having other learning centers on site. They charge $5 per child and a fee for each adult. They send out an orientation video to teachers before a visit.

It was mentioned that it might be a good idea to have groups prepay to avoid not having enough participants to run a tour; maybe offer group discounts, require reservations.

At Greenbank, Tony said that they incorporate parents to control them and keep them from interfering. They assign them tasks and try to educate the adults as well as the kids.

At Walnford, Harold said the most parents and teachers have no interest in the tour and are often distracting.

Please ask adults to turn their cell phones off. At Cooper Mill, Ivins has a sign that says that only cell phones manufactured before 1840 are allowed.

Ivins said that they usually have 2 classes from the same school, one in the morning and one in the afternoon. Each class is usually around 40 kids and they can be split up. For *Pancakes, Pancakes*, there is only one class at a time.

Milling as a Craft

Alisa Crawford

Alisa had the honor of working under Charlie Howell, renowned miller, who often said, "I must pass on the craft." In her opinion, a one-on-one apprenticeship is not enough; there needs to be a standardized educational system for learning and passing on the craft of milling. At this time, we watched a video of Charlie Howell dressing the stones at Crossroads Village in 1992.

Alisa received a SPOOM grant to study milling in the Netherlands this past March. In the Netherlands, their training program is 2 years, and students are given 2 binders, each 3 inches thick. Training is given at all different types of mills, not just grain mills. At the 150 hour mark, one can apply to take certified miller training; if one passes, the person becomes a certified Dutch volunteer miller. Alisa's training was condensed from 2 years to 2 weeks. There are 14 lady millers in the Netherlands. She may be able to be accepted as a student, and she has the books (which are in Dutch). She may be permitted to take the exam.

There needs to be standardized training for each miller so that there is not such a range of experience; it is not safe, and it is not good for the mills or for the public.

Peter recommended developing a boilerplate template for manuals, and recommended that everyone read Dedrick. It might be a good idea to develop a set of best practices for different aspects of milling. The question of funding for this was raised.

Maddox raised the point that milling is more than just opening the gate and having meal come out the chute. You need trained people, as mills can be dangerous places. Proper training is crucial, as mills could be shut down if safety becomes an issue.

The English have a Young Millers program for ages 8-16. Steve shared that they do outreach in the schools at their mill (Stratford Hall Plantation) to find those interested in the mill and its history. They cover how the colonies developed, and immigration; they pick a community of sites and train at each one; the history is important.

Alisa described the Dutch Trade Fair that occurs on her site; the fair is on a Friday school day and has 12 different stations. Maddox said that the milling message needs to be taken to the schools.

Tom pointed out that we must be careful of cultural homogenization and remember where knowledge comes from. We need to rely on technology to preserve things, we need to document operations.

Master Millers Program Proposal

Alisa Crawford and Mason Maddox

The Master Millers Program is an idea whose time has come so that the craft of milling is not lost for future generations. The program is based on the Museum Accreditation Program (MAP), which has 3 levels. This program would consist of four levels:

1. Miller Training
    a. Mill Operation – Drive System
    b. Grinding
    c. Product Refinement

2. Mill Management
    a. Collections Care
    b. Mill Maintenance

3. Interpretation & Education
    a. Docent Training
    b. Educational Programs
    c. Mill Interpretation

4. Sustainable Future
    a. Product Development
    b. Food Handling
    c. Licensing – Dept. of Ag.

Like the MAP program, a mill would work on each piece, one at a time, so that they would have to focus only on one area at a time. If they passed through all of them, they could be accredited.

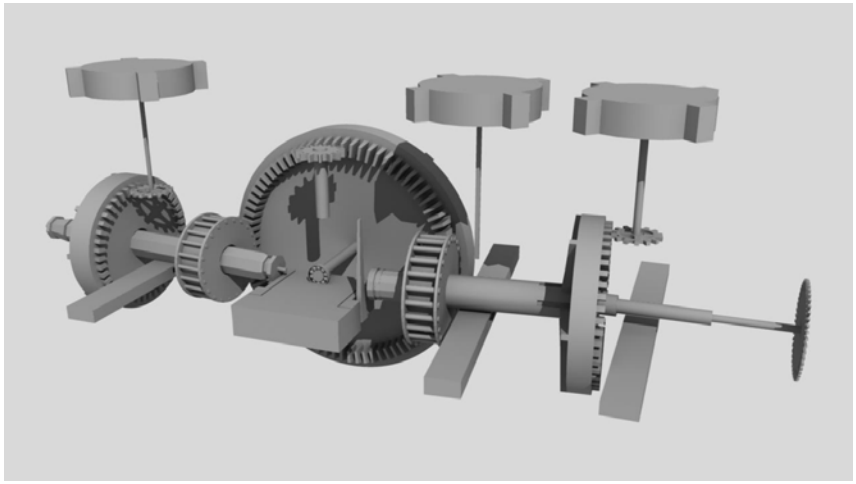
Funding for this program would be through grants. A team of two millers (Mobile Master Millers) would make a site visit; this team would be matched up by skill and availability. Colvin Run is an accredited museum. A book of accredited mills could be established, which would be a possible benefit of meeting the criteria. One point that was discussed by the group at large was what a mill would get out of going through the entire process of meeting the above criteria…what is the payoff?

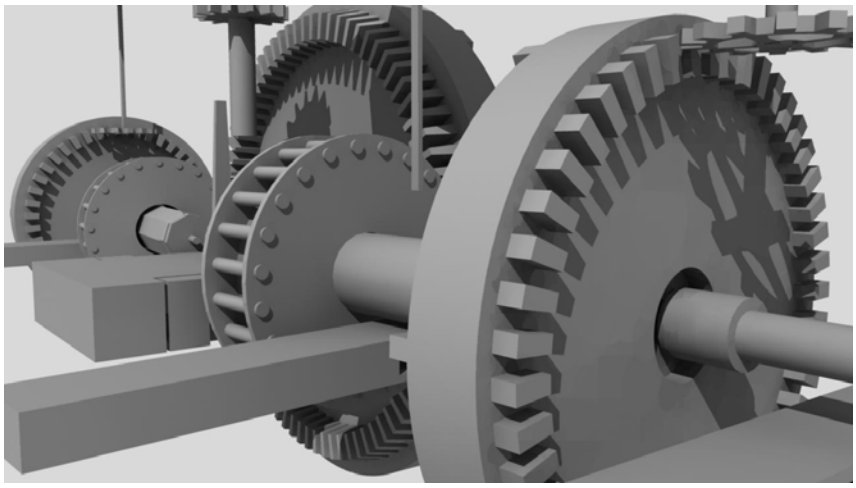
Digital Animation Project

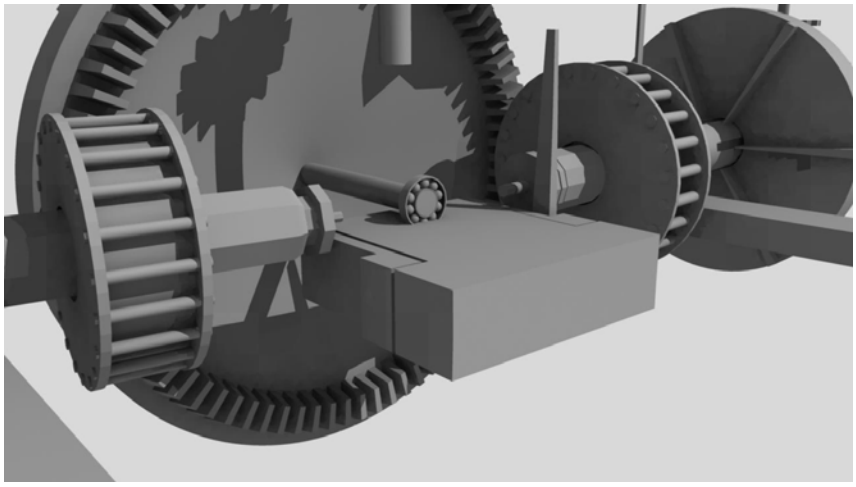
Drexel University

Glen Muschio, Associate Professor, Program Director, Digital Media, Department of Media Arts, College of Media Arts & Design, Drexel University
Christopher Redmann, Faculty Member, Digital Media, Department of Media Arts, College of Media Arts & Design, Drexel University

Here are some still shots of the digital animation of the Mill at Anselma's gear train that were presented by Drexel University.







History of Flour Milling in the Mid-Atlantic

Dr. Brooke Hunter

Why does the history of flour milling in the mid-Atlantic matter?

1. Flour was the *staple* of the middle colonies. A grain culture dominated the region. Thus, understanding the mid-Atlantic experience must include the grain trade. However, what we traditionally define as "middle" (PA, NJ, NY) is challenged by the geographical reality of the grain trade. To meet new market demands from western and southern Europe after 1750 caused by wars and bad harvests, slave owners living in Maryland and Virginia switched from tobacco to wheat production. Historians have long argued that slavery and grain cultivation did not go together. And yet the historical evidence proves that slaveholders did produce grain. In fact, they helped to supply a large portion of the grain surpluses needed to manufacture flour on a larger scale after 1750. The historical boundaries were not as fixed as historians suggest. If we are to define a region by its economy then the early mid-Atlantic included the upper Chesapeake as well as the traditional middle colonies.

2. To say that flour saved the new nation would be an exaggeration. Still, flour was essential to the American economy during a critical time in U.S. history. When the new nation teetered on the brink of failure during the 1780s-1790s, international demand for American *flour helped keep the struggling republic's economy (and nation itself) afloat*. Moreover, flour milling united agriculture and industry. As a result, it inspired technological advances and fostered internal improvements such as roads and canals that would aid the nation's economic and industrial development. Consider that three quarters of the cargo transported on the Erie Canal was grain or flour.

3. It is an *American story* – the grain trade/flour industry has played a central role in the nation's economic development and westward expansion. Though not the only model, it is one.

The history of flour milling in the mid-Atlantic can be divided into three main eras:

The Philadelphia Era: Grain and flour exports to the West Indies began in the 17th century. Pennsylvania emerged victorious in a trade war with New York in the 1720s-1730s. The colony's new inspection system helped garner the title "the bread basket of America." This created a brand name (Philadelphia flour), and then even more regionalized branding occurred, down to specific mill requests. Milling during the Philadelphia era was decentralized as mills were scattered across the countryside. The Brandywine mills broke this pattern and formed America's first milling center (8 by the American Revolution). Their success created a new era.

The Baltimore Era: Baltimore centralized the flour industry by combining manufacturing and trade in one location. This era began after the American Revolution because: 1) Baltimore was closer to the vast quantities of grain that was grown in the upper Chesapeake and Shenandoah valley, 2) Oliver Evans' technology was used to build bigger and better mills. Baltimore's heyday was short-lived. New York surpassed Baltimore's flour exports in 1827 and Rochester outpaced its flour production by 1836.

The New York Era: Technology (Erie Canal) once again led to important changes, in particular, an intra-regional specialization of grain production (west), flour

milling (western NY), and trade (NYC). New York remained a flour center through the Civil War.

In the mid-19th century, the top grain producers were the U.S., Prussia, Russia, Egypt and Canada. After the Civil War, flour milling moved to the Midwest. There, once again fertile soil and technology (roller mills, steamships) forged a new system. By the 1880s the United States emerged as the world’s undisputed flour power.

Milling Interpretation Practices

Alisa stated that with a windmill, the miller is the only person to operate the machinery, and she needs to be undisturbed during the operation of the mill.

Each site needs to evaluate: how involved is your operation?

Pete said that they do tours, 2 guides per tour. The tours are held at scheduled intervals. After the tour, the interpretive story begins. They also sell flour directly out of the mill.

Mason stated that they do tours on the hour, and that each tour comes through with a docent.

Ivins said that at Cooper Mill they take groups, one group per floor in each area. He also stated that you have to be prepared for things to happen in the mill (to go wrong).

William shared that at Yates Mill, the tours are timed and limited to fifteen people per tour.

Steve said that you need to control the flow of people if it gets busy.

Harold said that at Walnford, there is no admission charge, since it is a public site. There is a maximum of 30 people allowed in the building due to fire codes. They have detection systems for malfunctions. The site runs 10-4 on weekends.

The overall consensus was that each miller knows when something is wrong with the operation in their mill (by sound, by sight), and that you need a plan for what to do with the public if things go awry.

Discussion then shifted to the Museum Accreditation Program (MAP), and how we can look to it for assistance. It covers the following categories: General, Collections, Public Dimension (Interpretation/Marketing and Public), and Governance. At this time, the idea of the Mobile Master Millers was revisited from Alisa and Mason's proposal. They would receive their reimbursement through grants. Millers need to be able to make a living. A program such as this, using MAP as a template, needs a core group of millers to exchange information. What is the next step to get a program such as this into reality?

Next Steps

The Forum attendees decided to set up a committee to explore the feasibility of a Master Millers Program as proposed by Alisa Crawford and Mason Maddox. The following individuals agreed to serve:

Steve Bashore
Alisa Crawford
Tom Kelleher
Peter Kricker
Mason Maddox
Dave Rollenhagen
Tony Shahan
Ivins Smith