

# Milling About

News from the Friends of Peirce Mill Summer 2000



d o w n s t r e a m

## Major Problem Discovered as Work Begins at the Mill

Restoration of Peirce Mill has begun. But predictably, given that the structure is 180 years old, the first project already has taken an unexpected turn.

Stephen Ortado, a preservation contractor and Friends of Peirce Mill member, was hired by FOPM to repair or replace a series of floor joists and supporting columns in the mill. Shortly after starting work, he had to put that project on hold temporarily in order to tackle a more pressing problem—repair of the 12 x 12 inch main beam, which bears a substantial share of the weight of the building.

It was only when Ortado began taking up floor boards on the main floor that he was able to assess the full extent of damage to the beam. The foot-square piece of solid oak now has a half-inch crack running length-wise along the top for almost its entire length, and also has rot in one area. The center post, which supports the weight of the upper floors, has sunk into the rotted area and now rests more than an inch



**Rocky Footing.** The column supporting the second floor has migrated eastward (toward the camera) due to a large crack in the horizontal beam. Note the vertical alignment with the lower column is off center. **Inset:** Steve Ortado measures the depth to which the post has sunk into the rotting main beam.

below the top of the beam.

“Our first challenge will be to lift the post off of the beam to remove the weight,” Ortado explained recently. Kirk Mettam, of Robert Silman Associates, will work with Steve to identify the best way to do this, and will assess options for repairing and strengthening the beam. Possibilities include filling the crack with epoxy, inserting a reinforcing metal rod into the beam, topping it with a steel plate, or some combination of these methods.

The ultimate goal is to restore the structure to operating condition, approximately as it was in the mid-1800s, which includes removing a series of posts added in recent decades to the first and second floors, and redistributing the weight of the building back to the original posts and beams. We will continue to work closely with the National Park Service on all aspects of the project, and will provide an update in future issues of *Milling About*.

## The Cleveland Park Connection

Contact with people living in the general neighborhood of Peirce Mill is important to our organization. The proximity of the mill may interest these folks in becoming members of the Friends and supporting our project. We have had several contacts with groups in Cleveland Park recently. On April 19, Richard Abbott and Philip Gaudette made a presentation on Peirce Mill to about a dozen residents at the Cleveland Park Club on 33<sup>rd</sup> Place, NW. This was at the invitation of Amy Lear White, a new member of FOPM and a neighbor of our

long-time member Mrs. Randall H. Hagner, Jr. Along with a talk about the history of the mill and the scope of the restoration effort, we projected transparencies made from a number of historical photographs in our collection and showed copies of early maps of the area. It was well received, and Philip and Richard are ready to take their show on the road to other groups. We welcome suggestions from anybody reading this about groups which might be interested in listening (and watching) the presentation.

A different Cleveland Park group—members of the Cleveland Park Historical Society—participated in a walk to the mill on June 18 led by Steve Dryden. Steve represented the Audubon Naturalist Society but he is



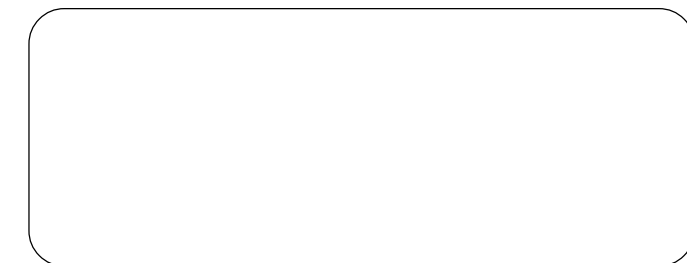
Photo: Archives of Friends of Peirce Mill.

In July 1937, these workers are trying to raise the water level in the millrace at Peirce Mill. The dam on which they are standing was built in 1905, when the mill was not operating, as a “decorative waterfall” by the ever-industrious Corps of Engineers. It was never intended as a true mill dam, and it never worked well for that purpose. The dam looks different now, mostly because the downstream channel is narrowed by rip-rap (large loose stones added much later to stabilize the bank).

An important factor for any water mill is the head—the water level upstream of the water wheel compared to the level downstream—which determines the maximum diameter of the water wheel. There isn’t much head available at Peirce Mill, so raising the upstream water level has always been a puzzle. The scheme in this photo used wood planks atop the dam to raise the water level a foot or two. If you walk upstream from the mill, you can still see the metal head gate and a stone wall from the 1930s reconstruction where creek water entered the millrace. You can also see large stones in the creek bed from that spot, the remains of a shallow rock dam from that period. A timber crib dam from the mid 1800s once existed just upstream from there. ☒



4305 38th Street, NW  
Washington, DC 20016



also a board member of FOPM. Fifteen people walked with Steve down the Melvin Hazen trail, with Steve providing interesting information on the flora and fauna of this wild, unspoiled area. The walk ended at the mill, where Ranger Ron Harvey gave a talk and tour of the mill. Richard Abbott spoke about the restoration project, including the work on the floors which recently began, and Sheila Ploger distributed copies of our membership application. We hope some of those people will want to join the Friends. FOPM members and Cleveland Park residents Chuck Ludlam and Paula Hirschhoff also took part.

## Lumber for the mill

As many of you know, the wood to be used in restoring the machinery and repairing the floors of Peirce Mill has to be a particular kind of oak—white oak (*Quercus alba*)—a wood with a very dense grain and high resistance to rotting from contact with water. The wood must be thoroughly air dried before it can be cut and shaped, and, depending on thickness of the lumber, this can take up to three years.

In order to have dry lumber available when we need it, we purchased \$45,000 worth of high quality white oak from Callahan Specialty Lumber in Amherst, Virginia, in March 1999. The wood was cut to dimen-



*Good Wood.* The new lumber for the repair work at Peirce Mill was milled recently at a lumber mill near Amherst, VA.

sions specified by Derek Ogden, the millwright who prepared plans for restoration of the water wheel, flume and gears of the mill. The accompanying photograph shows the lumber being inspected last July at the sawmill by our consultants (and prospective contractors) John O'Rourke and Gus Kiorpes. John and Gus are now completing the restoration of George Washington's Grist Mill at Mt. Vernon, and we plan to retain them for work on the machinery at Peirce Mill.

We also purchased lumber for the floors of the mill with advice from Steve Ortado, one of our members and a preservation contractor who will be carrying out that part of the restoration project. Last June, we ordered \$4,200 worth of white oak lumber cut to the proper dimensions for joists and columns from Maryland Forest Products, Nanjemoy, Maryland. The lumber is being moved this month from the mill to a storage site at the NPS Center for Urban Ecology on MacArthur Blvd., NW, and will be moved to the mill as needed.

## Historic Structures Report

Work is now moving forward on the final draft of the Historic Structures Report (HSR). Rebecca Stevens, Historical Landscape Architect for the National Capital Region, National Park Service, provided a complete set of comments on the draft prepared by Quinn Evans Architects and Friends volunteers, which were discussed at a meeting on June 8. Baird Smith of Quinn Evans is supervising work on the sections they are responsible for, and an FOPM team consisting of Philip Gaudette, Daniel Goggin, Sheila Ploger and Richard Abbott are working on researching and redrafting other sections of the report. The target date for completion and submission to the National Park Service is August 15. Fortunately, it was possible to get approval from the National Park Service to begin work on the mill floors in advance of the completion of the HSR so that this effort—which proved to be so protracted and complicated—has not delayed the start of work on our project.

## TIMS Symposium

The International Molinological Society (TIMS), a European-based organization, will visit Peirce Mill this September when it is in the area for its biannual conference/symposium at Stratford Hall Plantation in Virginia. There will be delegates from 16 countries. This very well-attended event will also involve mill tours and a visit to the Hagley Museum in Delaware. Bob Lundegard, a member of both the Friends of Peirce Mill and the Friends of Colvin Run Mill, has been instrumental in making these arrangements. The Hagley Museum will display documents relating to Peirce Mill in an exhibit on the Fitz Waterwheel Company, the company that was contracted by the National Park Service in 1935 to carry out the last major restoration of Peirce Mill. While the symposium itself is fully booked, it would be desirable to have some of our members at the mill during the visit of the tour group. If you are interested, and particularly if you have international contacts involved in milling, please get in touch with Richard Abbott at (202) 244-5267.

## Grant Applications

Grants, pledges and donations received by the Friends of Peirce Mill now total just over \$212,000. (This excludes receipts of membership dues, which total about \$2,400 a year.) While we continue to push for Federal funds for the project, it may be that we will have to raise the entire \$1 million cost ourselves. The only way to reach that goal is to churn out is to churn out applications to foundations and corporations, and to reach out to individuals at every level. We have had a small group of volunteers working on this, but we need to greatly increase the scale of the effort. The first job is calling donor organizations to request

information and applications, then grant proposals have to be drafted to a target list of donors. Much of the material required in these applications has been written for the grants we have already applied for – so the job is not that difficult. It does, however, require a computer and access to e-mail. If we could recruit a group of ten members to do this (we have four already), this would not be too time consuming for any one of us. Richard Abbott would appreciate hearing from members willing to donate some time to help in this important activity. We have a long way to go to reach our \$1 million goal.

## The Mill as a Classroom

Rock Creek Park received a year 2000 *Parks As Classrooms* grant from the National Park Service for the development of a curriculum-based education program for Peirce Mill designed for 4th and 5th graders. "Milestones in Millstones" will focus on the scientific advancement from simple machines to the complex automated mill of Oliver Evans. The evolving program will be pilot tested this fall. An exciting possibility which has just emerged is to link school visits to the mill to viewing of the fish ladder which is planned for installation at the dam adjacent to the mill. In this way, schoolchildren would be able to see the mill as it fits into the Rock Creek environment as a whole, and its connection with the Potomac River and the Chesapeake Bay.

## Welcome to New Rock Creek Park Staff Members

There have been two new appointments to the staff of Rock Creek Park, National Park Service, our partners in the Peirce Mill project. A warm welcome to Laura Illige, Chief, Cultural Resources and Visitor Services, and Perry Wheelock, Cultural Resources Specialist. Perry knows Peirce Mill well, as she authored a Cultural Landscapes Inventory of the Mill and surroundings in 1998. We will be working closely with both of them, and of course continue our excellent working relationship with Superintendent Adrienne Coleman and Assistant Superintendent Cindy Cox. We also want to acknowledge the cooperation and support we receive from Rock Creek Park staff members Dwight Madison, Scott Ahrensbrak, Dan Hodgson, and Dan Winings.

## Annual Meeting and Open House

Please reserve the date of Saturday, October 14 to attend our annual meeting and open house at the mill. We plan to repeat the very successful event we held last

year (though a bit earlier this time). As many of you know, over 400 people came to the Mill last November and enjoyed music, films, craft exhibits and refreshments. This is an all-day affair, beginning with our annual meeting from 9:00 until about 10:30. It's an opportunity to meet other members and visitors and to learn about current work at the Mill from planned talks and exhibits. More about this to come.

## Welcome New Members!

Our membership continues to grow. We'd like to welcome the following new members to Friends of Peirce Mill.

Tom, Brooke, & Ryland Garnett	Laurie and Adam Sieminski
Mark Strattner	David P.S. Cammack
Julia Peirce Marston	Julia L. Washburn &
John Rende	William M. Kules, III
Scott Taylor & Jaynie Simmons	Peter Y. Sonnenthal
Donald Abbott	Dennis Smyth & Eileen Moore
Judy Hubbard Saul	Valerie K. Burden

## The Association for Preservation Technology

Members may not be aware of the fact that we recently joined the local chapter of the Association for Preservation Technology. APT organizes frequent tours and other events connected with historic preservation in the Washington area, which you might want to take part in. The annual picnic, held this year in Piscataway Park, is on August 5. Check the link to APT on our web site.

## New Evidence Lays Spelling of Name to Rest

It's official. The correct spelling of the Mill's name may break the rule we all learned about "i before e", but a recent finding at Rock Creek Church Cemetery on North Capitol



*Clues to the correct spelling of the Mill can be found on the headstone of its namesake—J. Peirce—interred at Rock Creek Church Cemetery.*

Street has helped to dispel the misspelling. The headstone of the Mill's namesake bears the inscription "J. Peirce." Apparently, the Peirce family has spelled it this way for many generations, but at some point the spelling was changed in National Park Service documents. The uncommon spelling causes many people to stumble.