



Photo: Archives of Friends of Peirce Mill.

The designers and operators of Peirce Mill faced a persistent challenge: How do you design a water wheel to work with the low head at the site? (Head refers to the vertical distance from the water level in the headrace above the wheel to the water level below the mill.) After the mill dam washed out around 1876, the millwrights built 3 or 4 more dams in the same general location over the next 30 years. And they installed a metal turbine to extract power efficiently without having to raise the head too much (which would require a taller dam). The mill operated on turbine power until 1897, when the main shaft broke and the mill was no longer commercially viable.

This photo from April 1935 shows the turbine lying horizontally and half-buried in construction debris. In the 1935 restoration, supervised by noted architect Thomas T. Waterman, the millwrights used a breast wheel design, a different solution to the problem of low head.



4305 38th Street, NW
Washington, DC 20016



Milling About

News from the Friends of Peirce Mill Spring/Summer 2002



Formation of an Advisory Board

We're pleased to announce the formation of an Advisory Board to the Friends of Peirce Mill.

Your Board of Directors felt that our restoration project could benefit from broader support within the community, particularly from those with special expertise in historic preservation. So we extended invitations to 20 individuals, of whom 18 accepted. The list of members, which appears below, includes architects, engineers, historic preservationists, historians, community officials, and educators.

To launch the new board we held an event at Peirce Mill on June 22nd, a catered lunch followed by a discussion and tour. Fourteen of the eighteen Advisory Board members plus the six members of the Friends' Board of Directors were able to attend. **Richard Abbott** of the Friends, and **Laura Illige** of the National Park Service/Rock Creek Park, welcomed the attendees on what proved to be a rather hot day. Fortunately we had some shade under the canopy, but there were some sweaty faces later when we did our tour! Special thanks go to **Bob Day** and his wife **Diana** for erecting and taking down the canopy and for making all the arrangements for the catered lunch.

In his remarks, Richard told the group that the Friends have raised \$265,000 toward the cost of restoring the mill and have contributed countless hours of volunteer time to the project over the past five years. We continue to believe that achievement of our goal of a restored and operating mill will have great value to the community, serving as a living museum of milling technology and a window on the early history of Washington D.C. Richard gave a brief history of the Friends, dating back to our founding in 1997, and described the restoration work currently underway on the floors of the mill. He said that while we continue to work with our partners in this project, Rock Creek Park, there is need for an improved working relationship based on mutual trust and confidence if our common goal is to be achieved. Given the lack of Federal funding in the foreseeable future, we believe that our involvement in the project represents the best chance for getting the mill running in any reasonable time frame.

Following Richard's remarks, **Steve Dryden**, Vice President of the Friends, spoke to the group about



Members of the Advisory Board enjoy lunch with Friends members at Peirce Mill, June 22, 2002

the history of the Peirce and Shoemaker families, owners of the mill during the 19th century, and about the numerous mill restoration projects currently underway around the country. **Philip Gaudette** distributed a packet of information which included historical maps of the area around the mill. **Laura Illige**, Chief Ranger of Rock Creek Park, spoke about the interesting plans for a fish ladder which will bypass the existing dam on Rock Creek adjacent to the mill and permit migration of fish further up the creek. Millwright **Derek Ogden** told members about some of his many experiences with mill restoration. A tour of the area around the mill followed, which unfortunately did not include an inspection of the area in the mill where repair work is currently going on as Rock Creek Park officials would not allow access to the lower floor of the mill.

Following are some of the issues on which we believe the Advisory Board can assist us:

- (1) suggestions on ways to broaden support for our project in the local community,
- (2) guidance on building a more effective working relationship with the National Park Service,
- (3) suggestions for sources of grant funds from foundations, corporations and individuals,
- (4) ideas for and help with fund-raising activities at the mill or elsewhere,
- (5) how to stimulate greater interest in local schools in educational programs at the mill,
- (6) ideas for ways to involve young people in learn-

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Architect Baird Smith tells Advisory Board members about the condition of the mill building.

ing activities in and around the mill,

(7) help in developing plans for a system to power the mill with water from Rock Creek, and

(8) guidance and suggestions for historical research on Peirce Mill and its surroundings.

Inauguration of George Washington's Grist Mill at Mt. Vernon

In the last issue of Milling About we told you about our February visit to Mt. Vernon to observe the work going on at George Washington's Grist Mill. Restoration work has now been completed and was marked by a special event at the mill on April 12. Our member **Mrs. Randall H. Hagner, Jr.**, who is also Vice Regent Emerita of the Founders, Washington Committee for Historic Mt. Vernon, arranged invitations to the event for **Richard Abbott** and **Steve Dryden**. Friends members are encouraged to visit the mill and see it in operation. The very impressive interior of the mill, with its new gears, shafts, and millstones, is the work of **Gus Kiorpes** and **John O'Rourke**, our consultants on the machinery repair and replacement at Peirce Mill. The water wheel (inside the mill, unlike Peirce Mill) is driven by a pumped water system which is somewhat similar to what might be installed at Peirce Mill. The mill is open from 10 AM to 5 PM every day. Just turn right at the entrance to Mt. Vernon and go about 2-1/2 miles and you'll see the mill on your right.

Friends Web Site

Keep an eye on our web site (www.peircemill-friends.org). We will be posting pictures of the ongoing work at the mill from time to time.

Exceptional Milling Website Launched

Ted Hazen, former miller at Peirce Mill, recently completed work on what is probably the most comprehensive web site on milling available. You can find it at www.angelfire.com/journal/pondlilymill/. The site has an extensive collection of articles on mill restoration, milling technology, the history of milling, tools, and advice on interpretation of mills to the public. Check it out and let Ted know what you think by e-mail at trhazen@hotmail.com.

Members of the Friends Advisory Board

Joan M. Brierton, Historic Preservation Specialist
U.S. General Services Administration, Center for Historic Buildings

Anne Brockett, Architectural Historian
URS Corporation

Dianne Dale, President
Anacostia Historical Society

Eric DeLony, Chief
*Historic American Engineering Record
National Park Service*

Mr. Harry deWit, Cultural Counselor
Netherlands Embassy

Edward D. Dunson, Assoc. Professor of Architecture
Howard University

Robert Friedel, PhD, Professor
Dept. of History, University of Maryland

Don A. Hawkins, Architect
*Chairman, Preservation Subcommittee,
Committee of 100 for the Federal City*

Philip Kogan, Commissioner
Advisory Neighborhood Commission 3F01

Robert Lundegard, Board Member
Friends of Colvin Run Mill

John Matteo, Associate
Robert Silman Associates (Structural Engineers)

Guy Munsch, Preservation Specialist
*Associate Curator, Office of the Curator,
U.S. Department of the Treasury*

Robert L. Nieweg, Sr. Program Assoc./Regional Atty.
National Trust for Historic Preservation

Derek Ogden, Millwright

Dennis J. Pogue, PhD, Assoc. Director for Preservation
Historic Mount Vernon

Martin Shore, Architect, President of APT's DC Chapter
Swanke Hayden Connell Architects

Baird M. Smith, AIA, Architect
Quinn Evans Architects

Stefani Sandow, Board Secretary
Architect

FOPM Board Members, Officers and Key Individuals

President:	Richard Abbott
Vice President:	Steve Dryden
Secretary/Treasurer:	Sheila Ploger
Business Manager:	David Lyman
Archivist:	Philip Gaudette
Legal and Tax Affairs:	Gene Hines
New Board Member:	Arthur Fort
Chair, Proctors	
Committee:	Mrs. Randall H. Hagner, Jr.
Assistant Chair,	
Proctors Committee:	Mrs. I. Townsend Burden
Special Events Coordinator:	Robert Day

Welcome New Members

The following are members who joined the Friends of Peirce Mill over the last year. Welcome!

Sam Walmer
Hilary Goldmann and Steven Graubart
Peter C. Quinn
Kristen Berry
Mr. & Mrs. Bernard Koteen
Nancy and Richard Gould
Beth Daley & Steve Holman
Sandra M. Foote
Tom and Kate Blackburn
Stefani Sandow
Anne O. Brockett

Repairs to the Main Beam and Column

Our contractor, **Steve Ortado**, has completed repairs to the main beam and the column which rests on it and supports the upper floors. The first part of this delicate work involved placing stainless steel rods in the crack in the top of the beam, then filling the area around it with a special type of epoxy material, greatly adding to the strength of the beam. Then a welded steel plate was placed between the beam and the column above it to provide a firm base for the column. Finally, another type of epoxy was injected into the base of the upper column to fill the voids left after removal of rotten wood.

Another part of the job involved removal and inspection of the column supporting the main beam at

the basement level. After installing a system of heavy shoring beams, Steve was able to remove the column and the capital above it. Inspection of the column revealed damage at the upper end where it was inserted into the capital. Because the column had already had its lower end removed some years ago due to water damage and replaced by wooden blocks, our structural engineers have recommended that it be replaced with an entirely new column which will rest on the stone foundation as it originally did. It is proposed also to install a new capital equal in size to those in the floor above, rather than the undersized one just removed. These recommendations have been submitted to Rock Creek Park and a decision is awaited.



Images of recent work on the support beams at the Mill. Left: Completed work on the main beam showing steel rods set in epoxy. Engineer **Brandon Rossetti** (center) inspecting the beam after column removal. At right, **Steve Ortado** and assistant **John Waters** removing the old column supporting the main beam.