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Francis Mill — Waynesville, North Carolina. Photo by: John Lovette

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*Francis Mill blanketed with snow. Winter 2008.
Photo by Tanna Timbes.*

Cover Photo

Francis Mill (NC-044-001) This lovely mill has been under restoration for a few years and is finally complete. A grant in 2003, from SPOOM, aided in the restoration project. Read the full story starting on page 14.

The mill is located on Hwy. 276, Three miles east of Waynesville, NC.

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Volunteers Successfully Resuscitate Ailing Grist Mill

By: Jamie Donahoe

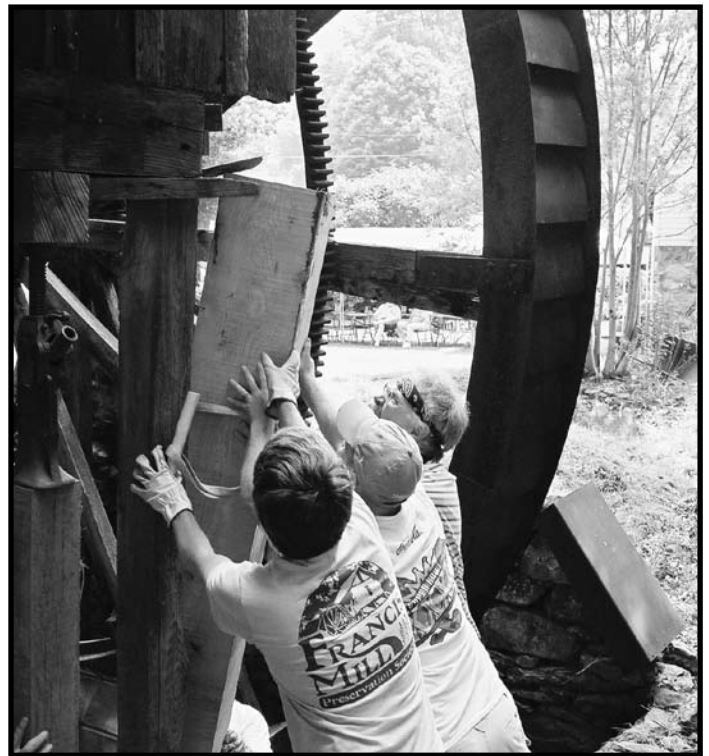
A mere five years ago, the Francis Mill in Waynesville, North Carolina, was near collapse and YouTube did not even exist. Today, as a result of strong community support, the mill site hums with activity, and you can see the Francis Mill back in action on the popular video-sharing site. The incredible success of the Francis Mill's restoration is the tale of a woman dedicated to preserving history and the determined crew of volunteers who rallied around the ailing structure.



The condition of the Francis Mill at the start of the July 2004 workshop would have given many people pause. Here you can see the deteriorated state of the water wheel and the poor condition of building's east side. Photo by Mark Slater

Tanna Timbes is that woman, and back in 2003, faced with the loss of the mill that her great-great-grandfather had built, she made two critical phone calls. One was to the North Carolina State Historic Preservation Office (SHPO), and the other was to the Heritage Conservation Network (HCN). The SHPO sent a historic preservation

specialist out to evaluate the 1887 gristmill. He found that except for the east wall, the building's fabric was actually in fairly good condition. Structurally, however, it was just the opposite, because of the extensive water damage and rot in the east sill beam, a critical structural component. If that beam gave way, the entire building could collapse. However, if the framing could be repaired, the structure, which had a charming "carpenter gothic" appearance, would survive. Tanna's call to HCN produced equally encouraging news. HCN is a nonprofit group based in Boulder, Colorado, that brings volunteers to historic sites around the world to do preservation work. HCN agreed to add the Francis Mill to its roster of projects, providing technical assistance and volunteer support for the mill's restoration. HCN contracted with preservation carpenter Jeffrey Finch to spearhead the effort, and in October 2003, he led a team of weekend warriors that jacked up the building and laid the groundwork for a hands-on building conservation workshop to be held in July 2004. Help was on the way!



Patrick Willis, Kevin Redding and workshop leader Jeffrey Finch raise the first of five posts that will support the new sill beam put in place during the July 2004 Heritage Conservation Network workshop. Photo by: Jamie Donahoe

In the meantime, Tanna, along with friends and neighbors, founded and incorporated the Francis Mill Preservation Society (FMPS), which sprang into action. FMPS enlisted the help of the entire community, asking neighbors and friends to prepare lunches for the volunteers, persuading businesses to donate materials and supplies for the workshop, and initiating a number of fund-raising efforts. For its part, HCN recruited volunteers from throughout the United States to come to North Carolina to help and secured grants, including funding from SPOOM, to cover some of the costs involved



Lou Mogavero and Will Hines attach the boom crane cable to the wheel before it is lifted from its precarious angle and gently set back down on a new, temporary support. Photo by Jamie Donahoe

The focus that first summer at the mill was the lower level framing, particularly replacement of the deteriorated sill beam. The work involved preparing new posts, cutting mortises in the beam to accommodate the existing framing, and repairing floor beams. Jeff Finch taught the 15 volunteers, many of whom had only limited carpentry experience, the timber-framing skills that they needed to do the work. Moving the five oak posts into place, ensuring that they were plumb, and devising a strategy for getting the sill beam in place all took significant strength, collaboration, and teamwork. The solution

involved bringing in a boom crane to lift the beam onto a platform built to the height of the posts. The 26-foot sill beam, cut from a neighbor's hemlock tree, slotted into place in the last hour of the last day of the workshop and was secured by pegs and bracing, culminating two weeks of concerted effort. Volunteers from near and far logged more than 800 hours during that two-week period alone; thanks to their efforts, the building was fully stabilized, with the lower level framing on the east side completely rebuilt. Yet there was more to be done.

HCN and the FMPS brought Jeffrey Finch back to the mill two more times to lead volunteers in additional workshops. Several of the volunteers at the 2005 workshop, including Ken Walton, a preservation carpenter from Kentucky, and historical architect Mark Slater from Ohio, had been at the 2004 workshop. Joined by two students in Eastern Michigan University's Graduate program in Historic Preservation and a host of long-term local volunteers, the 2005 crew repaired the upper level framing and flooring, putting in new posts, joists, flooring, and rafters. Tim Timbes, Lou Mogavero, and Jerry Donahoe continued to work at the site through the winter. By the end of the 2006 workshop, the building was structurally sound and had been fully enclosed and flume supports were under construction. It was time to focus on getting the mill working again.



Tim Timbes and Jerry Donahoe install battens on the east side of the mill on a glorious October day in 2006. Photo by Tanna Timbes.

Cont. Volunteers Successfully Resuscitate Ailing Grist Mill

Though a comprehensive survey has yet to be completed, the Francis Mill is believed to be one of just a handful of gristmills remaining in a region that was once dotted with them. As did its brethren, the Francis Mill played more than a strictly utilitarian role in the community. It served as a social gathering point, where farmers from the nearby Great Smoky Mountains could come to swap news and gossip while waiting for their corn or wheat to be ground.

This unassuming water-powered gristmill was built by William Francis, a millwright and builder, on a piece of land given to him by his father-in-law on the occasion of his marriage. The square mile of land is still known as Francis Cove, and the mill is still owned by Francis's descendants.

The mill passed to William's son, Monteville P. Francis, who, in 1914, replaced the original yellow poplar wheel with a steel Fitz waterwheel. Upon Monteville's death, Dewey V. Francis inherited the Francis Mill. Dewey operated the mill regularly, milling wheat, corn, and grits for both his family and the local community until

his death in 1976. The mill then passed to his daughter, Hester Ann Francis Boone, who dreamed of repairing and restoring the mill to its original condition. Denied that opportunity, the task fell to her daughter, Tanna Boone Timbes, and the many dedicated volunteers in the Waynesville community.

The original intent was to restore the mill's 1914 waterwheel. During the first summer of work, the same crane that lifted the sill beam into place also lifted the wheel from its deteriorated posts, just high enough to slip in some new timbers. Set back down, the wheel rested straight in the wheel well and was no longer in danger of collapsing into the building. It rested there for three more years. However, given the wheel's poor condition and the fact that it was not the original wheel, additional experts advocated replacement, at a cost of \$20,000. A flurry of fundraising followed, and in June 2007, a group of nine FMPS volunteers (three of whom had participated in the original 2004 workshop) and a crew from the Waterwheel Factory of Franklin, North Carolina, installed a new 24' x 24" welded water wheel. The FMPS then hired G. Dean

FALLS MILL 1873

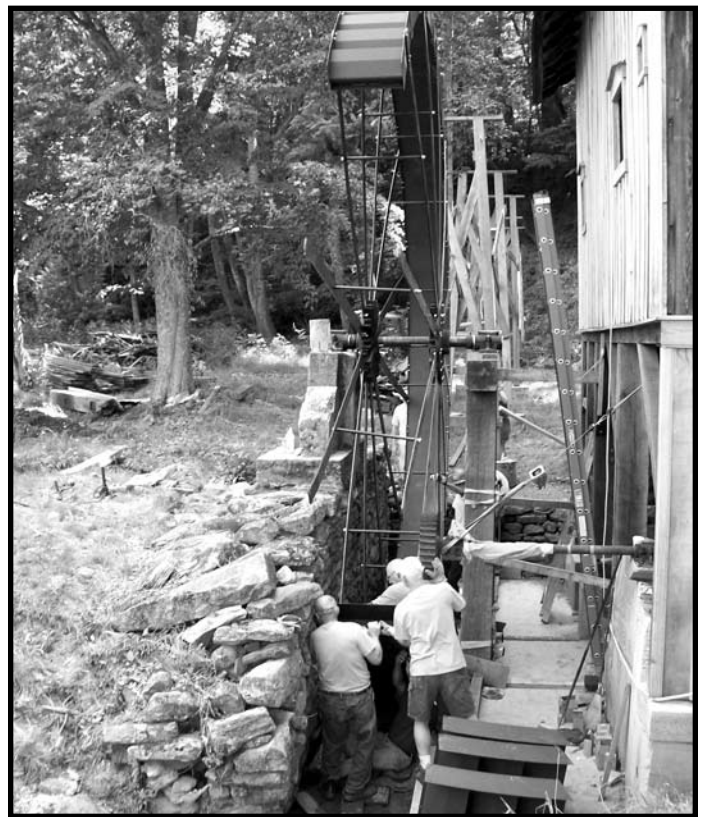
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FMPS volunteers and a crew from the Waterwheel Factory assemble the new water wheel in June 2007. Supports for the flume are visible behind. Photo by: John Lovett

Cooke Builders to build and install the new wooden flume. Constructed of hemlock and locust, it rests on a series of seven wooden supports and runs 128 feet. Its design is based on photographs of the original flume, which stood until the mid-1980s, when it collapsed under particularly heavy snows. The FMPS, which by this time was running its own work sessions, coordinated all the remaining work of getting the water to the mill. The mill dam and pond were in place but needed to be repaired, and the mill race needed to be reestablished in order to bring water the 460 feet to the mill. Ten volunteers from the FMPS, including Randy Siske, Jimmy High, and Tim Timbes, and volunteers from Raven Road Builders and Plemmon's Plumbing, both local businesses, spent several weeks refurbishing the mill dam and connecting the wooden flume to the pond via an underground pipe. Grants from the Steele-Reese Foundation, the Mast General Store, the Janirve Foundation, and the Haywood Community Foundation made that stage of the project possible.



Long-time FMPS volunteer Jimmy High adjusts the shaft that runs from the ring gear to the wheels and belts. Photo by: John Lovett

On September 22, 2007, just about noon, as preparations for the second annual Music at the Mill fund-raiser were under way, a shout went up as water ran from the pond, along the flume and over the wheel, turning it for the first time in 31 years and setting off waterworks of a different kind as Tanna wept with joy. As momentous an occasion as it was, there was one more hurdle--getting the stones turning.

This was one area beyond the scope of the FMPS volunteers, even though, through the restoration process, they had become very knowledgeable about gristmills and their operations. With the remaining Steele-Reese

A Millwright's Journal

Transcribed and compiled
By **William E. Denton**



Leslie Houseknecht, a Pennsylvania millwright, recorded his daily activities in a journal. The entries from 1894-1895 have been transcribed and printed to provide insight into the social, economic and religious times of his day.

Appendix relates history of the people and businesses in the area.

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Cont. Volunteers Successfully Resuscitate Ailing Grist Mill

Foundation funding, millwright John Lovett was brought to Waynesville in April 2008 to complete the myriad jobs associated with getting the mill working again. Though complex, the final stage was actually not as daunting a challenge as it could have been because the millstones, belts, sifters, and other equipment had been left in the mill when it ceased operating.

Lovett spent approximately two weeks on site, fabricating new millstone bearings, repairing the corn and wheat damsels, installing a waterwheel gating system, rebanding the wheat stones, rebuilding the sifter, putting on all the belts, and sharpening the corn and wheat stones, among other tasks. The mill was ready to go.



Millwright John Lovett, under the bed stone, inserts the adjustment bolts for the wooden bearings that will keep the millstone drive shaft snug. Photo by: John Lovett.



Tanna Timbes, Tim Timbes, and Jerry Donahoe proudly stand inside the mill. The plaques behind them list the names of the people who contributed to the mill's new water wheel. Photo: Francis Mill Preservation Society.

The big day had come at last. On April 28, 2008, John Lovett, Tim Timbes and Jimmy High ground 150 pounds of corn, bringing the five-year effort to a happy ending—which you can see online at <http://www.youtube.com/watch?v=mx5qfztUxuQ>.

The work of the FMPS, however, continues. The group members are still actively raising funds for all that they hope to do. The Music at the Mill fund-raiser has become an annual event, with bluegrass and BBQ on the site. Immediate plans call for designing and installing interpretive panels and making the site more accessible. The mill is open to the public the first weekend of every month in the summer and fall and by request. The site has already played host to school groups and participants on the annual Cold Mountain history tour. Planned exhibitions about the role of the mill in the community will help bring its history to life, just as turning stones have brought the mill itself to life once again.

To learn more about or contribute to the Francis Mill and the FMPS, see the group's website at www.francismill.org. More information about volunteer preservation project opportunities through HCN can be found on its website at www.heritageconservation.net.



Francis Mill is complete!

